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November 7, 1981
FOUR DOLLARS

Implement&Tractor

The business magazine of the farm & industrial equipment industry

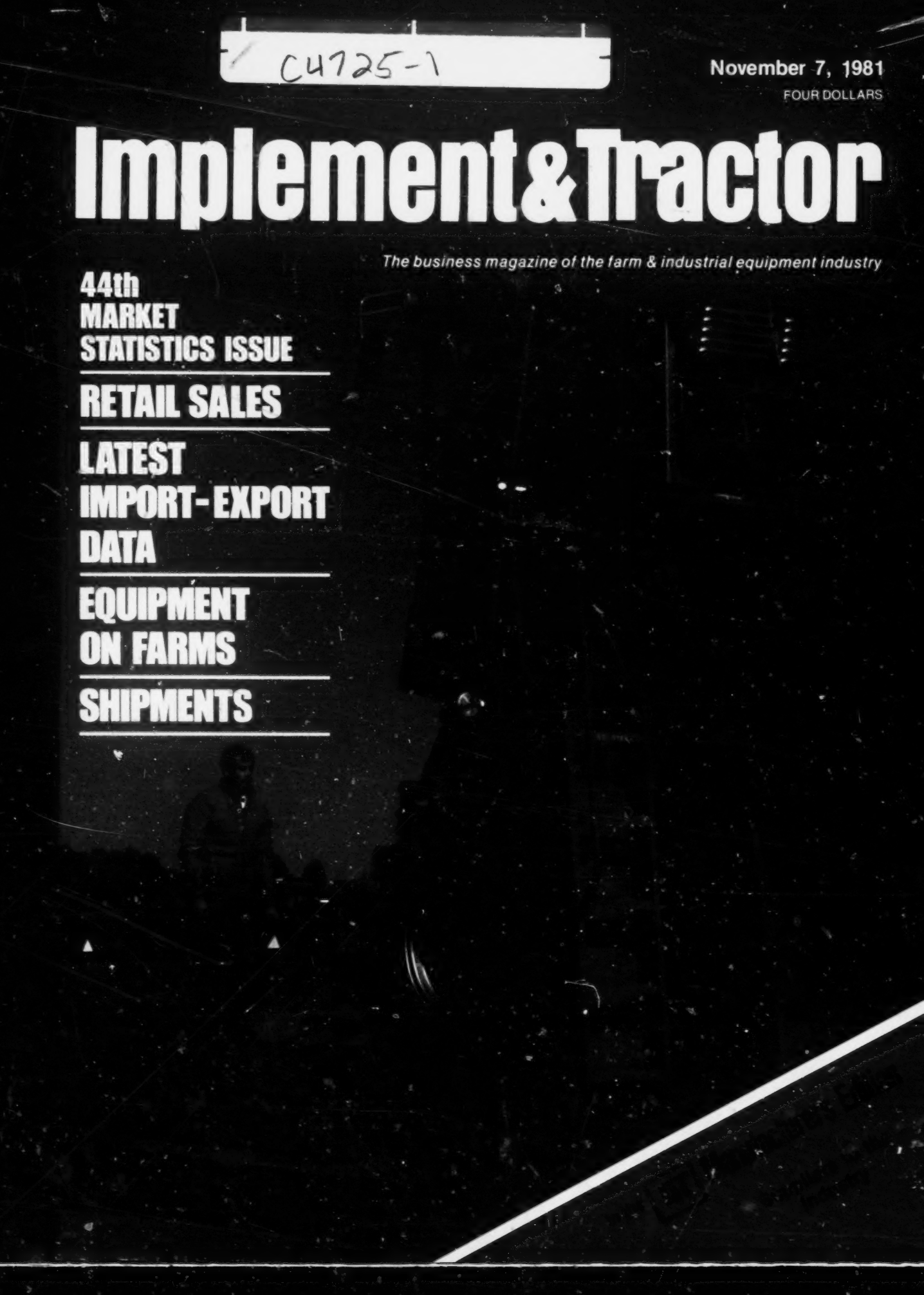
44th MARKET STATISTICS ISSUE

RETAIL SALES

LATEST IMPORT-EXPORT DATA

EQUIPMENT ON FARMS

SHIPMENTS



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Implement & Tractor

The business magazine of the farm & industrial equipment industry

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80: **'Wrongful Termination': How Four Recent Lawsuits Stand.** I&T has been following several court actions the past 12 months. An update.

On the cover... At the Massey-Ferguson store at Antioch, Ill., G. A. Ammon directs L. D. Luiskman in the loading of a combine. (Photo courtesy Massey-Ferguson)

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what's ahead...

November 7, 1981

SEPTEMBER'S RETAIL SALES OF FARM EQUIPMENT in the U.S., according to the flash report of the Farm & Industrial Equipment Institute, fell off substantially in most categories. Farm wheel tractor volume was off by a third from September 1980, as were combine sales. For the first nine months, however, combines, conventional balers and mower-conditioners were about even with the first three quarters of last year. The FIEI flash report:

	Unit Retail Sales					
	September			January-September		
	1981	1980	Pct. Change	1981	1980	Pct. Change
Farm Wheel Tractors:						
2-wheel drive						
40-100 hp	3,626	4,998	-27.5	39,326	45,395	-13.4
Over 100 hp	3,004	4,974	-39.6	30,864	35,747	-13.7
Total 2-wheel drive	6,630	9,972	-33.5	70,190	81,142	-13.5
4-wheel drive	729	1,044	-30.2	7,138	7,277	- 1.9
Total Tractors	7,359	11,016	-33.2	77,328	88,419	-12.5
Combines (S-P)	2,772	4,132	-32.9	15,851	15,734	+ 0.7
Balers*	1,017	1,195	-14.9	11,859	11,958	- 0.8
Forage Harvesters**	1,263	1,678	-24.7	5,253	6,425	-18.2
Mower Conditioners	1,596	1,661	- 3.9	16,260	16,341	- 0.5

*Bales under 200 lbs. **Shear-bar type.

CANADIAN RETAIL SALES ALSO FELL OFF IN SEPTEMBER, according to the flash report of the Canadian Farm & Industrial Equipment Institute, but the industry's performance for the first nine months of 1981 showed considerable strength.

	Unit Retail Sales					
	September			January-September		
	1981	1980	Pct. Change	1981	1980	Pct. Change
Farm Wheel Tractors	1,942	3,033	-36.0	19,857	20,768	- 4.4
Mower-Conditioners	303	438	-30.8	3,474	3,705	- 6.2
Balers*	350	580	-40.0	2,744	3,453	-20.5
Combines (S-P)	795	905	-12.2	3,260	2,531	+28.8

*Bales under 200 lbs.

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turn which has two different formulas:

1. Stock order purchases, divided by inventory.

2. Stock order performance times gross turn.

"...My own personal view is that much of what the parts manager does is right, gleaned from years of experience. But as these managers are gradually replaced by a younger breed, many of the old skills which had been acquired intuitively are not transferred. The new manager must learn all of these skills over again by making the same mistakes that his predecessor made. In the seminars we conduct, our goal is to make the computer system an extension of the part's manager's proper operating methods.

"Unfortunately, many of these computer systems do not feel the needs nor do they address themselves to the very basic requirements of inventory management...."

Re: Wil-Rich Cultivator Clearance: We Blew It

When we did our report on the Prairie Agricultural Machinery Institute's study of 10 cultivators, we made a serious typographical error. We reported the shank lift height on Wil-Rich's 13CPW heavy-duty cultivator at 3.6 inches. Wrong. It should have been 13.6 inches, the highest among the 10 units reported. Sorry.

I&T SINCE 1886

AUCTION PRICES OF USED EQUIPMENT

An exclusive I&T monthly report of actual prices paid recently at these leading national wholesale auctions.

Asterisk beside tractor price indicates highest bid offered on tractors which were not sold.

YODER & FREY, INC. Archbold, Ohio (October 13, 1981)

ALLIS-CHALMERS TRACTORS

545B, ldr.	11,500
XT190, 1964 (Rough)	2900*
170, 1968 (Good)	3775
160 diesel, 1970 (Rough)	1600*
D17, 1959 (Fair)	1400*
WD45, 1951 (Rough)	710
WD45, 1950 (Good)	925
WD45, 1949 (Fair)	575
C, (Rough)	420

CASE TRACTORS

1370 diesel, 1971 (Good)	7950
1070 diesel, 1972 (Fair)	8500*
1030 diesel, 1967 (Good)	4500*
1030 diesel, 1967 (Fair)	3550*
830, 1965 (Fair)	1500*
830 diesel, 1965 (Fair)	1300*
830 diesel, 1964 (Fair)	1300*
580B, ldr., (Good)	5650
530, 1956 (Rough)	1450
400, 1956 (Rough)	1100*
310, ldr., 3250	3250

COCKSHUTT TRACTORS

1600, 1962 (Rough)	1900
570, 1954 (Rough)	600*
30, 1949 (Fair)	560

DAVID BROWN TRACTORS

1200 diesel, 1965 (Rough)	2100
1200 diesel, (Rough)	1100*
990 diesel, 1970 (Rough)	2500
900 diesel	2050
900, 1958 (Rough)	500

JOHN DEERE TRACTORS

4620 diesel, (Fair)	8300
4430 diesel, 1975 (Good)	13,550
4230 diesel, 1976 (Good)	13,700*
4020 diesel, 1970 (Good)	8400*
4020 diesel, 1967 (Good)	7500
4020 diesel, 1967 (Good)	7300*
4020 diesel, 1967 (Good)	6800*
4010 diesel, 1963 (Good)	4800*
4010 diesel, 1961 (Fair)	3800*
3010 diesel, 1965 (Good)	3675
3010 diesel, 1964 (Fair)	2900*
3010 diesel, 1961 (Rough)	2650
2520, 1970 (Good)	4150
830 diesel, 1958 (Rough)	2000
820 diesel, 1956 (Rough)	1400
720, 1956 (Rough)	1100
720 LP, 1956 (Rough)	950*
70, 1953 (Fair)	1000*
430, 1958 (Fair)	925
A, 1948 (Rough)	625
B, 1949 (Fair)	450
M, plow, cult.,	900
LA, plow, cult., (Fair)	790

FORD TRACTORS

8000, 1972 (Fair)	6300
5000, 1975 (Good)	6550
5000, 1972 (Fair)	4300*
5000, 1969 (Rough)	3400*
4000, 1971 (Good)	3325
4000	1170
4000, (Rough)	1050*
3000, ldr., 1939 (Fair)	3000*
3500, ldr.,	2200*
971, ldr., 1957 (Fair)	1150
900, 1957 (Fair)	1100*
900 diesel, 1957 (Fair)	750
861, ldr., 1957 (Fair)	2125
621, ldr., 1956 (Fair)	1700*
Dexta, 1956 (Fair)	1050*
Dexta, 1955 (Rough)	1300*
Jub., 1952 (Fair)	1700*
Jub., 1953 (Rough)	1500
8N, 1952 (Fair)	1450*
8N, ldr., 1951 (Good)	1500*
8N, 1951 (Fair)	1300
8N, 1951 (Rough)	1125
8N, 1950 (Fair)	1250
8N, 1950 (Fair)	1125
8N, 1950 (Fair)	1100
8N, 1950 (Rough)	1025
9N, 1945 (Fair)	950
9N, mo., 1945 (Good)	850*
9N, 1945 (Rough)	760
9N, 1944 (Rough)	835

FERGUSON TRACTORS

35, 1962 (Fair)	900
20, (Rough)	520

INTERNATIONAL HARVESTER TRACTORS

1468 diesel, 1975 (Good)	7750
1466 diesel, 1976 (Fair)	8000*
1466 diesel, 1976 (Fair)	7000
1066 diesel, 1973 (Fair)	8500*
1066 diesel, 1973 (Fair)	7800*
1066 diesel, 1972 (Fair)	7500*
1066 diesel, 1972 (Rough)	7100*
806 diesel, 1965 (Good)	4975
806, 1964 (Rough)	2225
706 diesel, 1967 (Fair)	3750*
706, 1966 (Fair)	2650*
706 diesel, 1965 (Good)	4725
706, 1965 (Fair)	2800*
706, 1965 (Fair)	2475
656 diesel, 1969 (Fair)	2850*
656, 1969 (Fair)	2600*
656, 1966 (Good)	3200*
656, hydro., 1966 (Fair)	2175
600 diesel, 1965 (Rough)	925
560 diesel, 1960 (Good)	1700*
560, 1960 (Good)	1650*
560, 1959 (Good)	1700*
460 diesel, 1959 (Fair)	1450*
460, 1958 (Rough)	925
454, 1969 (Fair)	2900*
434,	1750
350, 1957 (Good)	1125*
350,	730
M, 1954 (Fair)	775
M, 1951 (Rough)	540
M, 1950 (Rough)	700
M, (Rough)	460
H, 1949 (Fair)	400
Sup. A, cult., 1947 (Good)	1150
Sup. A, 1947 (Good)	1125
A, 1946 (Fair)	710
A, (Rough)	500*
C,	550
C, cult., (Rough)	425

MASSEY-FERGUSON TRACTORS

2244, dozer,	3625
1080 diesel, 1969 (Rough)	3800
275, 1976 (Fair)	6400*
202, ldr.,	2000
Sup. 90 diesel, 1957 (Rough)	1600*
65 diesel, 1960 (Rough)	1800
50, 1958 (Fair)	2000
35 diesel, 1955 (Fair)	1450*

MINNEAPOLIS-MOLINE TRACTORS

G1000 Vista, 1963 (Good)	2800*
445, 1959 (Fair)	1650

OLIVER TRACTORS

2655 diesel, 1972 (Rough)	5250*
1955, 1972 (Rough)	4000*
1900, 1961 (Rough)	1600*
1850, 1966 (Good)	2100*
1800, 1960 (Rough)	2200*
1750, 1967 (Good)	2800*
1655 diesel, 1975 (Good)	5500
1600 diesel, 1961 (Rough)	2300
770, 1961 (Fair)	575*
88, 1950 (Rough)	480

WHITE TRACTORS

4-180 diesel, duals, 1977 (Good)	15,500
2-105, 1974 (Fair)	10,750*
1870, 1969 (Good)	6150

Farm Wheel Tractors Unit Retail Sales, 1975-1980
(40 pto horsepower and over)

	1975*	1976**	1977	1978	1979	1980
Alabama	3,514	3,987	3,213	2,869	2,702	2,202
Alaska	6	13	19	20	28	31
Arizona	638	654	666	755	797	993
Arkansas	4,561	4,376	4,024	3,905	4,013	3,285
California	4,858	4,571	4,317	4,684	5,088	4,818
Colorado	1,595	1,396	919	1,036	1,193	1,331
Connecticut	175	207	145	203	189	236
Delaware	286	282	226	189	255	146
Florida	2,972	2,718	2,467	2,436	2,341	2,593
Georgia	5,581	5,433	3,956	4,178	3,717	2,944
Hawaii	111	117	106	76	56	79
Idaho	1,980	1,845	1,234	1,303	1,263	1,451
Illinois	9,960	9,542	8,561	8,587	7,651	6,442
Indiana	6,010	5,915	5,508	5,540	4,850	3,781
Iowa	10,230	9,066	8,396	9,679	9,671	7,136
Kansas	5,485	4,615	3,394	3,979	4,824	4,322
Kentucky	5,668	5,910	5,043	4,851	4,479	3,871
Louisiana	3,390	2,858	2,843	2,846	2,730	2,930
Maine	315	381	311	245	229	244
Maryland	1,188	1,087	867	813	842	723
Massachusetts	186	186	121	129	144	142
Michigan	4,076	3,916	3,215	3,412	3,256	2,937
Minnesota	6,789	5,490	5,849	7,139	7,096	5,300
Mississippi	3,866	4,037	3,676	3,841	3,541	3,501
Missouri	5,152	5,165	4,685	5,423	5,575	4,089
Montana	1,786	1,580	953	1,252	1,358	1,438
Nebraska	4,809	4,272	3,464	4,282	4,760	3,751
Nevada	84	80	63	82	134	117
New Hampshire	173	201	125	150	146	148
New Jersey	418	453	360	365	315	300
New Mexico	554	547	390	420	463	420
New York	2,919	3,392	2,966	2,930	2,880	2,617
North Carolina	7,914	7,253	4,751	4,584	4,022	3,550
North Dakota	5,273	3,584	2,336	3,401	3,562	2,575
Ohio	6,395	6,434	6,057	6,097	5,004	4,103
Oklahoma	3,619	3,173	2,681	3,003	3,846	2,988
Oregon	1,429	1,612	1,320	1,423	1,385	1,429
Pennsylvania	2,847	3,459	3,055	2,812	2,454	2,178
Rhode Island	25	24	21	26	26	16
South Carolina	2,960	2,788	1,857	1,904	1,851	1,466
South Dakota	2,807	2,016	2,016	2,792	2,712	1,983
Tennessee	4,834	5,285	4,530	4,649	3,964	3,036
Texas	10,963	10,083	9,228	9,169	10,784	10,047
Utah	677	722	559	635	711	660
Vermont	294	484	343	390	404	341
Virginia	3,514	3,250	2,431	2,578	2,516	2,126
Washington	1,920	2,041	1,440	1,771	1,851	2,053
West Virginia	755	800	570	598	594	456
Wisconsin	4,787	5,176	5,121	5,633	6,050	5,002
Wyoming	508	424	316	382	462	410
U.S. Govt.	35	34	181	51	155	220
Misc.	254	252	17	90	49	374
U.S. Total	**161,145**	**153,169**	**130,912**	**139,607**	**138,990**	**119,331**
N. Amer. Export	14,307	12,001	10,810	8,229	5,973	8,425
Inventory, Dec. 31	57,111	60,978	76,855	63,728	71,176	70,710

Source: Farm & Industrial Equipment Institute.
*Includes approximately 23,000 units under 40 hp.
**Includes approximately 16,000 units under 40 hp.

TRACTOR, COMBINE RETAIL A SIX-YEAR

By Bill Fogarty

■WHAT'S HAPPENED in the U.S. farm equipment business in the past six years? In this brief space, we hope to give you a glimpse of what has been happening with the two most significant product groups of the industry—tractors and combines.

The two tables also provide a look at where changes have taken place, *i.e.*, in the individual states.

We have also added to the bottom lines the standing factory and field inventory totals at the end of each year.

Tractors. When we first reviewed variances in farm tractor sales, it appeared that North Carolina would have to be declared a major disaster area. In that state, unit sales for 1975 were at 7,914. By 1980 they had fallen by 55 per cent, according to FIEI data. How could any area stand that?

Then we realized that 1975 and 1976 data include units under 40 hp; the rest do not. And North Carolina had sales of over 2,500 under-40-hp units *recorded* in 1975. Viewed in this context, that state's decline in unit volume appears somewhat more bearable.

A check of nine Corn Belt states (Illinois, Indiana, Iowa, Michigan, Minnesota, Missouri, Nebraska, Ohio and Wisconsin) indicates that tractor sales volume slacked off 27 per cent

SALES: PERSPECTIVE

from 1975 to 1980. In the five southeastern states of Alabama, Florida, Georgia, North Carolina and South Carolina, the decline was 44 per cent. But, as in the case of North Carolina, a number of under-40-hp tractors were included in 1975 reports and not in 1980.

Combines. In only two of the past six years have combine retail sales dipped below 30,000 units in the U.S. Last year's decline was substantial.

In 1975, of the 33,084 units sold, 8,100 were Class V (or larger) and the rest were Class I through IV. The industry wound up the year with 1,415 Class I-IV and 751 Class V units in inventory. By contrast, in 1980, the size profile had changed. There were sales of 12,545 Class I-IV and 13,196 Class V-VI combines. Similarly, inventory divided about evenly. On hand at the end of the year: 5,997 units in Classes I-IV and 6,073 in V-VI.

Bottom line. We don't show it on the tables, but you may be interested to know, as you study the Dec. 31 inventory lines through the six years for both tractors and combines, that the prime rate was running approximately thus:

1975: 6.75 per cent.
1976: 6.25 per cent.
1977: 7.75 per cent.
1978: 11.75 per cent.
1979: 15.25 per cent.
1980: 21.50 per cent. □

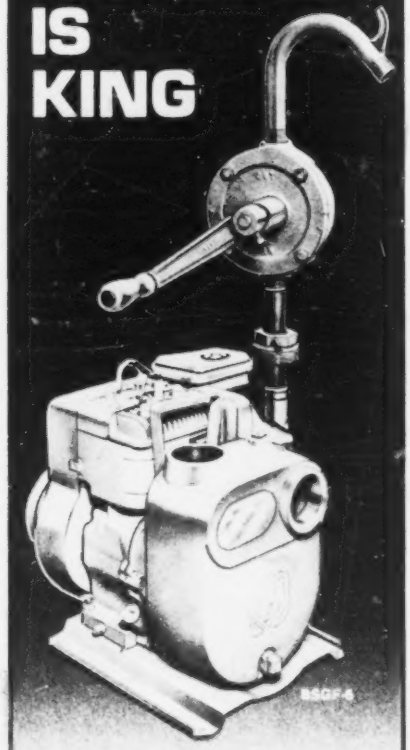
Self-Propelled Combines Unit Retail Sales, 1975-1980

	1975	1976	1977	1978	1979	1980
Alabama	370	409	428	539	504	245
Alaska	1	.....	.....	.....	6	5
Arizona	83	94	55	47	35	60
Arkansas	1,006	933	999	1,045	1,123	672
California	442	447	207	253	237	284
Colorado	273	286	251	249	316	341
Connecticut	.....	2	.....	1	2	.....
Delaware	63	83	58	50	55	43
Florida	102	127	102	165	148	78
Georgia	669	820	564	725	764	384
Hawaii	.....	1	.....	.....	.....	.....
Idaho	381	435	349	360	371	440
Illinois	4,069	3,895	3,452	3,600	3,305	2,708
Indiana	2,249	2,229	1,959	2,048	1,964	1,489
Iowa	3,802	3,507	2,912	3,665	3,474	2,928
Kansas	2,068	1,949	1,595	1,605	1,851	1,888
Kentucky	516	530	559	508	579	363
Louisiana	469	493	622	657	650	447
Maine	9	9	15	8	2	7
Maryland	201	211	184	171	161	149
Massachusetts	.....	1	1	.....	.....	.....
Michigan	680	606	506	562	609	596
Minnesota	1,894	1,624	1,741	2,110	2,085	1,652
Mississippi	586	630	798	806	891	543
Missouri	1,630	1,442	1,459	1,575	1,676	1,043
Montana	457	514	363	456	393	414
Nebraska	1,970	1,764	1,400	1,738	1,845	1,517
Nevada	5	7	9	7	4	3
New Hampshire	.....	.....	.....	.....	.....	.....
New Jersey	48	70	75	68	48	28
New Mexico	55	56	44	21	32	42
New York	183	200	154	171	179	191
North Carolina	658	693	594	591	662	419
North Dakota	1,087	1,174	860	1,182	1,383	1,014
Ohio	1,709	1,646	1,625	1,655	1,654	1,213
Oklahoma	642	746	503	461	620	642
Oregon	206	241	267	248	220	243
Pennsylvania	257	307	307	272	283	198
Rhode Island	.....	.....	.....	.....	.....	.....
South Carolina	375	411	350	355	384	221
South Dakota	612	563	620	712	725	513
Tennessee	562	582	658	686	692	381
Texas	1,300	1,451	1,102	897	966	974
Utah	49	55	44	49	41	40
Vermont	.....	.....	.....	.....	.....	1
Virginia	273	264	206	216	259	125
Washington	487	506	269	328	381	460
West Virginia	2	3	5	4	3	5
Wisconsin	467	430	494	575	611	675
Wyoming	80	63	49	52	52	59
U.S. Govt.	3	.....	1	.....	1	.....
Misc.	34	4	5	1	.....	.....
U.S. Total	**33,084**	**32,513**	**28,821**	**31,494**	**32,246**	**25,741**
N. Amer. Export	.....	1,610	1,538	1,421	1,854	2,654
Inventory, Dec. 31	4,536	4,524	9,665	9,161	8,339	12,070

Source: Farm & Industrial Equipment Institute.

GENERAL PURPOSE PUMPS. HAND PUMPS. ANY PUMPS.

MONARCH IS KING



The Monarch line of pumps includes models from ⅓ to 30 HP — each offering the ultimate in dependability. Illustrated are The Monarch BSGF-6 liquid fertilizer pump, and the Monarch V-100 ¾ inch multi-purpose hand pump.

For further information and specifications, write us now.

A tradition of quality and dependability since 1935.

MONARCH INDUSTRIES
322 West 86th St. P.O. Box 20476
Bloomington, Minnesota 55420

Circle (7) on Reply Card

FARM TRACTOR HORSEPOWER:

State	Two-Wheel-Drive Tractors						
	40-49	50-59	60-69	70-79	80-99	100-119	120-129
Alabama	629	273	236	129	231	165	46
Alaska	4	9	5	2	4	1	.....
Arizona	73	30	81	105	129	112	14
Arkansas	612	323	275	84	117	75	72
California	596	695	951	475	553	309	69
Colorado	116	105	90	28	100	102	45
Connecticut	60	40	64	21	20	13	.....
Delaware	14	20	23	10	18	17	4
Florida	537	338	534	310	341	198	29
Georgia	775	310	304	202	263	194	75
Hawaii	32	18	9	7	9	1	.....
Idaho	91	119	152	34	180	191	72
Illinois	213	251	409	284	410	551	257
Indiana	272	230	296	169	306	348	147
Iowa	78	150	419	247	606	934	306
Kansas	144	128	174	75	270	477	209
Kentucky	974	802	624	301	444	187	49
Louisiana	546	269	298	121	124	124	51
Maine	67	50	43	11	26	29	2
Maryland	159	103	92	52	71	85	18
Massachusetts	34	41	24	14	19	5	.....
Michigan	280	317	369	176	310	307	81
Minnesota	102	236	469	241	634	784	201
Mississippi	626	274	230	158	226	181	75
Missouri	469	461	489	178	481	378	158
Montana	197	130	148	37	156	135	81
Nebraska	50	58	114	44	308	612	180
Nevada	17	19	15	4	13	14	3
New Hampshire	51	33	31	6	14	8	.....
New Jersey	86	61	38	15	40	19	3
New Mexico	92	37	39	46	27	31	12
New York	258	376	493	191	527	314	39
North Carolina	987	529	426	286	480	258	63
North Dakota	17	32	43	19	79	236	149
Ohio	494	457	473	216	466	414	125
Oklahoma	309	180	181	78	270	389	103
Oregon	361	270	204	54	144	105	21
Pennsylvania	311	375	430	117	386	276	42
Rhode Island	7	4	3	.....	1	1	.....
South Carolina	394	183	177	116	144	99	30
South Dakota	16	35	73	40	233	360	110
Tennessee	877	471	348	157	271	180	52
Texas	1,843	894	915	539	806	709	267
Utah	73	126	122	41	87	61	22
Vermont	44	69	83	23	60	31	1
Virginia	608	397	343	143	263	142	19
Washington	594	534	256	64	150	61	21
West Virginia	196	127	57	35	27	4	2
Wisconsin	146	444	865	401	890	760	202
Wyoming	27	47	29	11	73	55	16
U.S. Government	23	.....	37	49	5	1	.....
Miscellaneous	66	37	45	222	2	.....	.....
TOTAL	**15,647**	**11,517**	**12,648**	**6,490**	**11,814**	**11,081**	**3,543**

THE 1980 STORY

1980 Retail Sales of Farm Wheel Tractors by PTO Horsepower (in units)

130-139	140-149	150-179	180 & over	Total 2-Wheel Drive	Four-Wheel-Drive Tractors: Under 200	200-249	250 & over	Total 4-Wheel Drive	All Farm Wheel Tractors	State
199	41	106	62	2,137	30	24	11	65	2,202	Alabama
.....	.....	.....	.....	25	.....	4	2	6	31	Alaska
113	38	94	100	889	31	42	31	104	993	Arizona
306	165	452	456	2,937	106	158	84	348	3,285	Arkansas
325	49	232	119	4,373	132	177	136	445	4,818	California
247	28	152	88	1101	76	113	41	230	1,331	Colorado
9	1	2	.....	230	5	1	.....	6	236	Connecticut
18	2	6	5	137	2	5	2	9	146	Delaware
110	24	42	18	2,479	46	50	18	114	2,593	Florida
389	81	180	120	2,893	11	32	8	51	2,944	Georgia
.....	.....	1	.....	77	1	.....	1	2	79	Hawaii
215	56	115	20	1,245	83	95	28	206	1,451	Idaho
1,371	358	1,017	430	5,551	423	316	152	891	6,442	Illinois
683	187	410	218	3,266	232	196	87	515	3,781	Indiana
2,029	556	788	250	6,363	404	267	102	773	7,136	Iowa
894	154	637	393	3,555	290	382	95	767	4,322	Kansas
206	42	103	61	3,793	34	28	16	78	3,871	Kentucky
208	161	340	424	2,666	84	122	58	264	2,930	Louisiana
10	.....	2	1	241	3	.....	.....	3	244	Maine
57	17	29	8	691	12	13	7	32	723	Maryland
3	1	.....	.....	141	1	.....	.....	1	142	Massachusetts
435	90	166	57	2,588	188	110	51	349	2,937	Michigan
1,106	226	424	110	4,533	378	274	115	767	5,300	Minnesota
331	107	563	470	3,241	72	90	98	260	3,501	Mississippi
582	157	323	165	3,841	101	81	66	248	4,089	Missouri
112	37	76	27	1,136	96	134	72	302	1,438	Montana
1,036	240	512	218	3,372	223	112	44	379	3,751	Nebraska
15	1	3	1	105	7	5	.....	12	117	Nevada
3	.....	.....	.....	146	2	.....	.....	2	148	New Hampshire
19	4	4	7	296	3	.....	1	4	300	New Jersey
59	7	40	11	401	8	5	6	19	420	New Mexico
211	31	51	11	2,502	72	23	20	115	2,617	New York
220	60	99	85	3,495	33	16	6	55	3,550	North Carolina
540	120	307	128	1,670	386	378	141	905	2,575	North Dakota
572	132	233	110	3,692	204	133	74	411	4,103	Ohio
650	62	274	119	2,615	162	178	33	373	2,988	Oklahoma
106	13	47	14	1,339	51	29	10	90	1,429	Oregon
128	25	27	9	2,126	28	12	12	52	2,178	Pennsylvania
.....	.....	.....	.....	16	.....	.....	.....	.....	16	Rhode Island
122	31	57	63	1,416	18	25	7	50	1,466	South Carolina
506	73	200	50	1,696	153	96	38	287	1,983	South Dakota
268	57	140	119	2,940	41	30	25	96	3,036	Tennessee
1,651	334	857	608	9,423	276	234	114	624	10,047	Texas
57	12	20	5	626	17	10	7	34	660	Utah
16	3	6	1	337	4	.....	.....	4	341	Vermont
102	22	31	31	2,101	15	8	2	25	2,126	Virginia
91	11	43	8	1,853	86	76	38	200	2,053	Washington
6	1	.....	1	456	.....	.....	.....	.....	456	West Virginia
589	153	204	76	4,730	175	69	28	272	5,002	Wisconsin
59	19	17	15	368	27	6	9	42	410	Wyoming
2	.....	3	.....	220	.....	.....	.....	.....	220	U.S. Government
.....	1	.....	1	374	.....	.....	.....	.....	374	Miscellaneous
16,986	**3,990**	**9,435**	**5,293**	**108,444**	**4,832**	**4,159**	**1,896**	**10,887**	**119,331**	**TOTAL**

DATA: Farm & Industrial Equipment Institute. Figures do not include garden tractors, motor tillers, or contractor's off-highway types. Report includes units marketed by these firms: Allied Farm Equip. (Leyland, Satoh); Allis-Chalmers; Belarus; J I Case; Deere; Deutz; Ford; International Harvester; Long; Massey-Ferguson; Steiger; Versatile; R. M. Wade (Satoh); and White. Sales reported as miscellaneous are retail sales which cannot be classified by state or as U.S. Government. They include sales and dispositions that do not go through usual marketing channels such as gifts to non-profit organizations, intra-plant or company transfers, etc.

RETAIL SALES OF SELECTED FARM EQUIPMENT – Jan.-Dec., 1979 and 1980 (1)
(In Units)

	Combines Self-Propelled		Corn Heads		Hay Balers (2)		Windrowers Self-Propelled — Power Units		Windrowers Self-Propelled — Total Heads		Grinder-Mixers		Shear-Bar Forage Harvesters (3)	
	1979	1980	1979	1980	1979	1980	1979	1980	1979	1980	1979	1980	1979	1980
Alabama	504	245	107	66	252	153	1	2	1	1	231	135	63	37
Alaska	6	5	.....	.....	9	19	.....	3	.....	4	.....	1	.....	.....
Arizona	35	60	5	7	43	44	63	64	69	76	4	8	16	11
Arkansas	1,123	672	11	5	427	186	2	.....	1	.....	62	82	28	11
California	237	284	65	53	244	174	300	281	327	311	15	5	80	74
Colorado	316	341	166	158	507	437	284	222	289	237	70	68	195	102
Connecticut	2	.....	1	.....	67	58	.....	.....	.....	.....	2	1	68	42
Delaware	55	43	37	44	18	15	.....	1	.....	1	12	8	15	12
Florida	148	78	76	51	113	77	3	.....	3	.....	64	46	26	26
Georgia	764	384	532	302	244	197	1	1	1	1	542	265	133	105
Hawaii	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	2
Idaho	371	440	12	22	505	600	357	404	369	413	48	66	74	75
Illinois	3,305	2,708	3,533	2,821	399	327	15	23	15	23	679	496	365	261
Indiana	1,964	1,489	2,095	1,615	422	316	12	8	12	8	605	390	263	191
Iowa	3,474	2,928	4,191	3,108	459	328	262	137	257	145	2,062	1,290	930	565
Kansas	1,851	1,888	425	343	495	312	411	290	421	300	363	252	348	263
Kentucky	579	363	412	284	455	292	3	3	4	3	345	306	235	182
Louisiana	650	447	2	3	164	68	.....	.....	.....	.....	17	21	26	19
Maine	2	7	.....	.....	89	70	3	2	3	2	1	1	63	46
Maryland	161	149	171	171	137	118	8	13	7	14	51	39	123	77
Massachusetts	.....	.....	.....	.....	59	50	1	6	.....	6	1	3	38	39
Michigan	609	596	592	566	483	382	81	64	85	65	273	263	527	420
Minnesota	2,085	1,652	2,004	1,481	971	735	781	648	804	666	918	629	1,199	873
Mississippi	891	543	10	6	209	79	.....	2	.....	2	70	48	76	62
Missouri	1,676	1,043	939	501	685	436	87	86	89	94	667	509	217	191
Montana	393	414	5	7	413	388	511	443	551	491	87	76	48	37
Nebraska	1,845	1,517	1,816	1,416	257	211	518	307	525	321	633	504	486	359
Nevada	4	3	.....	.....	59	40	76	59	77	63	2	2	6	8
New Hampshire	.....	.....	.....	.....	59	58	1	.....	1	.....	2	.....	39	34
New Jersey	48	26	17	21	65	41	.....	1	.....	1	14	11	32	17
New Mexico	32	42	12	16	168	128	99	63	99	67	19	12	11	9
New York	179	191	287	243	812	769	74	69	74	70	133	129	1,054	853
North Carolina	662	419	530	400	327	303	3	2	3	2	257	162	141	96
North Dakota	1,383	1,014	86	58	96	58	922	588	986	639	194	146	155	144
Ohio	1,654	1,213	1,582	1,132	709	528	14	9	14	9	538	406	391	269
Oklahoma	620	642	15	23	907	407	168	104	172	111	187	131	61	38
Oregon	220	243	13	10	335	413	260	281	265	301	37	33	87	49
Pennsylvania	283	198	305	291	977	751	89	55	90	57	350	321	789	539
Rhode Island	.....	.....	.....	.....	6	7	.....	7	.....	6	1	.....	1	1
South Carolina	384	221	194	131	102	85	.....	.....	.....	.....	127	66	38	37
South Dakota	725	513	540	302	183	98	784	538	842	580	429	332	485	395
Tennessee	692	381	223	156	610	389	1	1	1	1	289	207	229	145
Texas	966	974	278	303	1,445	762	119	86	132	91	270	250	86	85
Utah	41	40	15	10	329	339	156	131	158	144	78	33	97	99
Vermont	.....	1	.....	1	132	110	1	4	1	4	3	.....	177	159
Virginia	259	125	221	127	488	393	7	7	7	7	165	97	259	202
Washington	381	460	71	39	348	432	213	195	226	198	20	21	104	146
West Virginia	3	5	6	7	265	166	.....	1	.....	1	36	28	58	31
Wisconsin	611	675	755	832	1,988	1,481	397	394	401	403	661	542	2,457	1,978
Wyoming	52	59	16	14	214	192	203	197	212	213	33	27	52	45
U.S. Government	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Miscellaneous (4)	.....	.....	1	7	.....	.....	.....	.....	.....	.....	6	.....	.....	.....
TOTAL	**32,246**	**25,741**	**22,374**	**17,154**	**18,750**	**14,022**	**7,291**	**5,802**	**7,594**	**6,152**	**11,673**	**8,468**	**12,451**	**9,461**

Data released Feb. 18, 1981, Farm & Industrial Equipment Institute.

(1) Includes revisions for prior months.
(2) For making bales of under 200 lbs.
(3) Pull-type, mounted, self-propelled.
(4) Sales reported as miscellaneous are retail sales which cannot be classified by state or as U.S. Government. They include sales and dispositions that do not go through usual marketing channels such as gifts to non-profit organizations, intra-plant or company transfers, etc.

Mower Conditioners All Types 1979	Mower Conditioners All Types 1980	Manure Spreaders Conveyor-Type 1979	Manure Spreaders Conveyor-Type 1980	
242	141	18	18	Alabama
2	8	1	1	Alaska
6	12	9	8	Arizona
574	371	115	89	Arkansas
49	45	86	70	California
166	160	71	58	Colorado
90	96	85	64	Connecticut
18	19	73	58	Delaware
124	87	30	31	Florida
279	229	51	47	Georgia
1	.....	2	1	Hawaii
123	167	137	137	Idaho
773	606	916	593	Illinois
709	529	717	489	Indiana
1,480	1,095	2,391	1,393	Iowa
1,010	638	263	201	Kansas
1,217	817	316	266	Kentucky
126	48	26	29	Louisiana
121	117	119	113	Maine
182	116	230	215	Maryland
81	53	76	72	Massachusetts
786	685	824	750	Michigan
1,474	1,062	1,995	1,537	Minnesota
198	101	31	19	Mississippi
1,787	1,199	441	321	Missouri
129	155	50	51	Montana
623	485	549	345	Nebraska
12	9	7	6	Nevada
70	75	53	59	New Hampshire
80	58	63	55	New Jersey
38	23	8	11	New Mexico
1,265	1,178	1,649	1,545	New York
389	285	166	145	North Carolina
172	140	114	107	North Dakota
1,121	808	1,033	820	Ohio
960	617	36	57	Oklahoma
201	279	135	112	Oregon
1,252	934	1,429	1,222	Pennsylvania
6	4	1	.....	Rhode Island
141	79	32	30	South Carolina
147	91	362	216	South Dakota
943	569	188	156	Tennessee
1,548	1,120	153	144	Texas
168	205	106	118	Utah
253	250	282	223	Vermont
762	674	261	232	Virginia
156	262	150	137	Washington
250	177	99	64	West Virginia
3,202	2,519	3,103	2,253	Wisconsin
74	55	54	37	Wyoming
.....	.....	.....	.....	U.S. Government
.....	.....	1	8	Miscellaneous
25,600	**19,452**	**19,107**	**14,733**	**TOTAL**

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MORE MARGIN per sale with *Belarus* "fuel misers"

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Circle (8) on Reply Card

Motor Vehicles and Specified Machines on U.S. Farms and Average Prices of Wheel Tractors, January 1, Designated Years[1]

Year	Tractors (exclusive of steam & garden)[2] Thousands	Motor Trucks Thousands	Grain Combines Thousands	Corn Pickers and Picker Shellers Thousands	Pick-up Balers Thousands	Field Forage Harvesters Thousands	Garden Tractors and Motor Tillers[3] Thousands	Wheel Tractors Wholesale Prices[4] Per Unit Dollars	Horsepower Dollars
1927	693	662	.....	.....	.....	.....	.....	.....	.....
1928	782	753	.....	.....	.....	.....	.....	.....	.....
1929	827	840	.....	.....	.....	.....	.....	.....	.....
1930	920	900	61	50	.....	.....	.....	.....	.....
1931	997	920	.....	.....	.....	.....	.....	.....	.....
1932	1,022	910	.....	.....	.....	.....	.....	.....	.....
1933	1,019	865	.....	.....	.....	.....	.....	.....	.....
1934	1,016	875	.....	.....	.....	.....	.....	.....	.....
1935	1,048	890	.....	.....	.....	.....	.....	.....	.....
1936	1,125	923	.....	.....	.....	.....	.....	.....	.....
1937	1,230	990	.....	.....	.....	.....	.....	.....	.....
1938	1,370	1,042	.....	.....	.....	.....	.....	.....	.....
1939	1,445	1,020	.....	.....	.....	.....	.....	.....	.....
1940	1,545	1,047	190	110	.....	.....	.....	.....	.....
1941	1,675	1,095	225	120	.....	.....	.....	.....	.....
1942	1,885	1,160	275	130	25	.....	.....	.....	.....
1943	2,100	1,280	320	138	31	.....	.....	$ 579	$ 21
1944	2,215	1,385	345	146	34	.....	.....	$ 658	$ 24
1945	2,354	1,490	275	168	42	20	68	$ 665	$ 25
1946	2,480	1,550	420	203	54	25	80	$ 733	$ 28
1947	2,613	1,700	465	236	65	30	122	$ 783	$ 30
1948	2,821	1,900	535	299	90	45	159	$ 890	$ 33
1949	3,123	2,065	620	372	135	60	192	$ 994	$ 35
1950	3,399	2,209	714	456	196	81	216	$ 1,073	$ 37
1951	3,678	2,310	810	522	240	102	242	$ 1,234	$ 42
1952	3,907	2,410	887	588	298	124	268	$ 1,297	$ 42
1953	4,100	2,520	930	630	345	148	296	$ 1,359	$ 39
1954	4,243	2,610	965	660	395	175	315	$ 1,513	$ 39
1955	4,345	2,675	980	688	448	202	332	$ 1,554	$ 39
1956	4,480	2,707	1,005	715	505	220	353	$ 1,682	$ 41
1957	4,570	2,745	1,015	740	560	240	375	$ 1,842	$ 41
1958	4,620	2,775	1,030	755	600	258	400	$ 2,111	$ 46
1959	4,673	2,800	1,045	775	645	270	425	$ 2,189	$ 48
1960	4,688	2,834	1,042	792	680	291	450	$ 2,338	$ 49
1961	4,743	2,850	980	740	685	291	468	$ 2,578	$ 50
1962	4,763	2,885	960	730	703	300	485	$ 2,819	$ 51
1963	4,778	2,925	940	720	718	307	500	$ 3,046	$ 53
1964	4,786	2,970	920	705	734	312	513	$ 3,443	$ 53
1965	4,787	3,030	910	690	751	316	699	$ 3,541	$ 56
1966	4,783	3,017	888	686	752	316	725	$ 3,886	$ 58
1967	4,786	3,009	867	680	748	319	750	$ 4,257	$ 62
1968	4,766	3,016	847	673	739	321	770	$ 4,709	$ 66
1969	4,712	3,004	820	657	725	314	790	$ 4,976	$ 71
1970	4,619	2,978	790	635	708	304	805	$ 5,560	$ 76
1971	4,562	2,985	760	629	698	309	815	$ 6,190	$ 80
1972	4,509	2,993	725	625	687	315	825	$ 6,486	$ 84
1973	4,477	3,006	703	618	680	324	835	$ 6,953	$ 85
1974	4,478	3,020	685	618	677	332	850	$ 7,294	$ 86
1975	4,463	3,032	666	615	666	337	870	$ 8,459	$ 91
1976	4,434	3,043	647	610	642	342	890	$11,220	$112
1977	4,381	3,052	630	605	614	346	905	$12,692	$124
1978	4,350	3,054	615	600	595	345	917	$13,431	$144
1979	4,990	3,555	664	694	769	376	1,060	$16,512	$1[illegible]9
1980	4,960	3,566	677	690	761	381	1,075	$18,139	$166
1981	4,925	3,577	690	685	752	386	1,085	$22,376	$187

[1]SOURCE: Reports of the USDA and the Bureau of the Census. After 1959, Alaska and Hawaii are included. On-farm data after 1970, except 1975 and 1979, are estimated by I&T.

[2]Consists of Wheel and Crawler Tractors only after 1944. Prior to 1945 some Garden Tractors may have been included but the number was small.

[3]Motor Tillers included after 1964.

[4]Estimated at wholesale level by dividing **Value of Manufacturers' Shipments** by **Units Shipped** and by **Maximum Belt Horsepower**, data are published in "Current Industrial Reports" of the Bureau of the Census.

Note: Data from the 1978 Census (Jan. 1, 1979 above) and later years, reflect changes in data collection, resulting in improved coverage by the Census and are not fully comparable with earlier years.

Principal Machines on Farms – 1981

STATE	WHEEL AND CRAWLER TRACTORS						TRACTOR MOLDBOARD PLOWS	
	1959 Census Number	1964 Census Number	1969 Census Number	1974 Census Number	1978[1] Census Number	Estimated July 1, 1981 Number	Estimated July 1, 1958 Number	Estimated July 1, 1981 Number
Maine	17,793	16,290	14,252	13,493	15,064	15,550	12,400	9,050
New Hampshire	6,605	6,253	4,953	4,989	5,584	5,980	4,600	2,800
Vermont	16,669	16,333	15,227	14,706	16,322	16,450	10,200	9,800
Massachusetts	12,068	11,575	9,537	9,341	10,902	11,700	8,800	6,000
Rhode Island	1,651	1,687	1,359	1,359	1,684	1,780	1,000	850
Connecticut	11,219	9,963	8,679	7,924	9,169	9,270	7,700	5,500
New York	138,670	136,304	122,645	118,313	128,248	131,000	107,000	80,800
New Jersey	24,726	22,042	19,984	19,324	22,991	23,300	21,500	17,250
Pennsylvania	144,759	144,149	126,810	124,251	142,844	147,600	118,600	100,000
Delaware	8,259	7,992	7,555	7,631	8,720	8,870	6,700	6,550
Maryland	37,291	37,203	34,174	34,705	40,699	41,600	30,500	28,500
NORTHEAST	**419,710**	**409,791**	**365,175**	**356,036**	**402,227**	**413,100**	**329,000**	**267,100**
Ohio	204,681	199,694	194,962	188,580	205,972	205,800	161,000	164,800
Indiana	186,853	181,086	174,055	167,382	183,002	182,600	149,000	146,400
Illinois	290,002	287,480	275,203	272,093	265,773	288,300	210,000	188,600
Iowa	327,863	329,172	318,998	317,052	328,292	329,300	235,000	223,300
Missouri	191,512	198,095	201,513	189,672	205,572	203,800	135,000	152,200
CORN BELT	**1,200,911**	**1,195,527**	**1,164,731**	**1,134,779**	**1,208,611**	**1,209,800**	**890,000**	**875,300**
Michigan	169,782	169,920	152,741	143,569	157,697	156,200	139,000	133,700
Wisconsin	234,387	247,427	229,752	237,457	258,119	264,800	171,000	170,300
Minnesota	275,833	284,887	258,614	260,535	282,533	287,500	210,000	189,300
LAKE STATES	**680,002**	**702,234**	**641,107**	**641,561**	**698,349**	**708,500**	**520,000**	**493,300**
North Dakota	121,039	122,056	118,069	123,072	121,966	123,500	84,000	70,800
South Dakota	115,639	120,100	111,532	114,456	112,782	112,900	84,000	71,100
Nebraska	175,254	180,423	166,098	170,423	177,691	181,900	108,000	98,700
Kansas	173,651	174,185	163,180	161,276	160,479	161,500	123,000	99,500
GREAT PLAINS	**585,764**	**596,764**	**558,879**	**569,317**	**572,918**	**579,800**	**399,000**	**340,100**
West Virginia	21,995	23,926	23,842	23,265	27,951	28,700	15,400	18,700
Kentucky	103,415	118,404	137,105	129,069	164,862	163,400	71,000	105,500
Tennessee	97,800	108,319	137,105	129,069	164,862	163,400	71,000	105,500
Virginia	75,143	78,989	79,347	76,121	90,284	89,900	52,000	63,200
North Carolina	140,639	149,850	150,825	130,140	152,917	145,000	57,600	73,400
APPALACHIAN	**438,992**	**479,488**	**513,647**	**469,536**	**566,045**	**553,200**	**239,000**	**327,100**
South Carolina	48,637	50,931	50,115	45,321	53,627	52,100	9,200	13,600
Georgia	89,392	89,049	84,366	77,067	85,049	82,900	23,500	34,000
Florida	35,820	41,295	42,958	44,192	57,226	60,000	12,300	20,500
Alabama	67,559	71,925	75,069	68,521	75,398	73,600	20,500	25,600
SOUTHEAST	**241,408**	**253,200**	**252,508**	**235,101**	**271,300**	**268,600**	**65,500**	**93,700**
Mississippi	84,425	90,347	88,677	76,808	80,964	77,000	29,700	32,400
Louisiana	53,229	60,618	63,194	55,933	64,337	62,400	15,400	22,500
Arkansas	83,852	90,993	86,977	78,083	89,421	87,300	41,900	50,100
DELTA STATES	**221,506**	**241,958**	**238,848**	**210,824**	**234,722**	**226,700**	**87,000**	**105,000**
Oklahoma	102,323	101,605	102,397	91,661	105,795	102,300	74,000	82,500
Texas	268,233	269,519	282,088	251,687	280,102	270,100	74,500	89,600
SOUTHERN PLAINS	**370,556**	**371,124**	**384,485**	**343,348**	**385,897**	**372,400**	**148,500**	**172,100**
Montana	59,510	61,832	58,729	58,457	55,941	59,400	30,500	28,500
Idaho	56,961	58,607	54,091	55,419	55,392	60,900	40,000	38,200
Wyoming	20,737	21,596	20,925	20,801	19,756	20,300	15,400	14,700
Colorado	64,051	63,906	59,112	58,091	59,959	62,300	34,000	28,800
New Mexico	17,146	17,919	15,998	17,021	17,546	18,350	11,300	8,800
Arizona	13,443	13,747	12,136	13,812	12,749	13,900	4,200	3,400
Utah	21,803	22,256	20,128	21,110	22,206	23,700	17,500	15,600
Nevada	5,297	5,557	5,318	5,515	5,453	5,950	3,100	2,700
MOUNTAIN STATES	**258,948**	**265,420**	**246,437**	**250,226**	**249,002**	**264,800**	**156,000**	**140,700**
Washington	63,114	65,813	58,600	59,542	58,190	68,700	42,000	41,300
Oregon	56,732	58,741	51,223	52,651	52,283	60,100	44,000	38,200
California	147,390	142,812	138,914	140,393	136,256	166,300	70,000	68,100
PACIFIC	**267,236**	**267,366**	**248,737**	**252,586**	**246,729**	**295,100**	**156,000**	**147,600**
TOTAL	**4,684,852**	**4,782,872**	**4,614,554**	**4,463,314**	**4,835,800**	**4,892,900**	**2,990,000**	**2,962,000**

[1]Only wheel tractors are included in the 1978 Census.

Principal Machines on Farms – 1981

STATE	COMBINES[1] 1964 Census Number	1969 Census Number	1974 Census Number	1978 Census Number	Estimated July 1, 1981 Number	CORN HEADS FOR COMBINES[2] 1969 Census Number	1974 Census Number	1978 Census Number	Estimated July 1, 1981 Number
Maine	875	218	242	415	435	120	141	192	200
New Hampshire	27	8	5	18	15	65	55	64	60
Vermont	344	113	87	170	160	175	238	375	400
Massachusetts	70	34	35	47	50	84	103	113	120
Rhode Island	20	5	7	15	15	21	10	23	20
Connecticut	77	40	15	86	75	92	85	157	160
New York	16,536	4,902	5,114	5,994	6,100	1,706	2,344	3,576	3,900
New Jersey	1,726	634	766	1,226	1,270	269	324	671	700
Pennsylvania	23,939	6,777	7,297	9,851	10,100	1,924	2,636	4,443	4,800
Delaware	1,780	979	1,127	1,351	1,400	566	681	1,035	1,085
Maryland	5,237	2,604	2,740	3,610	3,700	1,555	1,954	2,799	3,000
NORTHEAST	**50,631**	**16,314**	**17,435**	**22,783**	**23,320**	**6,577**	**8,571**	**13,448**	**14,445**
Ohio	50,291	20,805	26,009	33,996	36,000	11,892	17,515	24,522	27,100
Indiana	46,395	23,871	29,485	37,695	40,700	17,920	24,616	32,737	35,900
Illinois	80,857	48,116	55,085	63,650	67,800	37,649	46,362	56,213	60,200
Iowa	86,178	28,221	42,117	55,889	63,000	22,302	37,864	53,427	60,400
Missouri	44,535	24,208	26,253	34,029	35,200	16,112	18,278	23,544	24,600
CORN BELT	**308,256**	**145,221**	**178,949**	**225,259**	**242,700**	**105,875**	**144,635**	**190,443**	**208,200**
Michigan	41,360	13,053	14,649	19,474	20,300	4,306	7,098	11,333	12,700
Wisconsin	45,516	10,859	13,392	18,553	19,800	3,566	5,147	8,589	9,400
Minnesota	71,748	27,189	35,033	45,225	49,300	12,102	18,780	27,390	30,500
LAKE STATES	**158,624**	**51,101**	**63,074**	**83,252**	**89,400**	**19,974**	**31,025**	**47,312**	**52,600**
North Dakota	41,782	26,952	27,273	31,112	31,300	753	864	1,619	1,670
South Dakota	28,289	11,926	13,941	16,587	17,600	3,483	5,386	7,759	8,800
Nebraska	43,205	25,730	29,224	35,147	37,000	13,370	18,578	24,687	27,200
Kansas	59,813	41,601	41,871	47,650	47,800	6,533	8,038	9,282	10,000
GREAT PLAINS	**173,089**	**107,209**	**112,309**	**130,496**	**133,700**	**24,139**	**32,866**	**43,347**	**47,670**
West Virginia	1,020	245	307	479	500	147	199	265	300
Kentucky	9,737	4,565	6,329	10,760	11,700	3,196	4,390	8,510	9,100
Tennessee	11,537	5,773	6,843	10,952	11,500	2,458	2,734	5,634	5,800
Virginia	9,281	3,769	4,309	6,150	6,300	2,243	2,972	4,487	4,800
North Carolina	14,847	7,982	8,828	13,535	14,000	5,279	6,696	10,671	11,500
APPALACHIAN	**46,422**	**22,334**	**26,616**	**41,876**	**44,000**	**13,323**	**16,991**	**29,567**	**31,500**
South Carolina	7,085	4,483	4,706	6,609	6,700	1,803	2,285	3,931	4,100
Georgia	9,177	5,408	6,255	9,924	10,600	4,036	4,836	7,637	8,000
Florida	1,230	1,010	1,182	1,792	1,950	584	773	1,207	1,250
Alabama	4,806	3,423	3,988	6,958	7,400	1,635	1,858	3,468	3,600
SOUTHEAST	**22,298**	**14,324**	**16,131**	**25,283**	**26,650**	**8,058**	**9,752**	**16,243**	**16,950**
Mississippi	6,099	6,977	6,893	10,190	10,200	441	310	593	600
Louisiana	5,145	6,414	7,034	9,715	10,100	357	231	403	350
Arkansas	13,086	12,657	11,484	14,095	13,700	294	725	292	300
DELTA STATES	**24,330**	**26,048**	**25,411**	**34,000**	**34,000**	**1,092**	**1,266**	**1,288**	**1,250**
Oklahoma	21,668	14,909	14,797	18,006	18,000	457	511	900	930
Texas	31,355	21,223	19,394	23,742	22,800	1,743	1,858	3,684	3,770
SOUTHERN PLAINS	**53,023**	**36,132**	**34,191**	**41,748**	**40,800**	**2,200**	**2,369**	**4,584**	**4,700**
Montana	16,011	11,687	11,392	13,225	13,100	121	107	101	90
Idaho	11,330	7,639	8,113	10,180	10,500	202	252	458	470
Wyoming	2,962	1,523	1,690	2,017	2,100	112	149	180	200
Colorado	11,062	6,937	7,338	8,488	8,800	1,032	1,632	2,397	2,650
New Mexico	1,898	1,041	1,229	1,541	1,650	52	117	246	270
Arizona	559	412	530	513	550	25	23	70	70
Utah	2,421	1,442	1,442	1,748	1,800	134	196	186	200
Nevada	277	201	253	269	280	9	21	3	5
MOUNTAIN STATES	**46,520**	**30,882**	**31,987**	**37,981**	**38,780**	**1,687**	**2,497**	**3,641**	**3,955**
Washington	9,706	6,891	7,330	8,471	8,700	307	269	490	480
Oregon	8,372	5,107	5,266	6,442	6,550	167	106	185	150
California	8,366	5,619	5,373	6,492	6,400	633	696	1,085	1,100
PACIFIC	**26,444**	**17,617**	**17,969**	**21,405**	**21,650**	**1,107**	**1,071**	**1,760**	**1,730**
TOTAL	**909,637**	**467,182**	**524,072**	**664,083**	**695,000**	**184,032**	**251,043**	**351,633**	**383,000**

[1]The Census in 1964 included self-propelled and pull types. The Census in 1969, 1974, 1978 and the estimated number for July 1, 1981 cover only self-propelled combines.
[2]The Census in 1969 included only corn heads on class 1-5 farms ($2,500 or more of income). The Census in 1974, 1978 and the estimated number for July 1, 1981 cover all farms.

Principal Machines on Farms – 1981

STATE	PICK-UP BALERS					FIELD FORAGE HARVESTERS[1]				
	1964 Census Number	1969 Census Number	1974 Census Number	1978 Census Number	Estimated July 1, 1981 Number	1964 Census Number	1969 Census Number	1974 Census Number	1978 Census Number	Estimated July 1, 1981 Number
Maine	3,339	2,446	2,255	2,770	2,670	998	712	914	1,341	2,100
New Hampshire	1,681	1,266	1,197	1,448	1,420	747	386	612	553	700
Vermont	5,796	4,171	3,975	4,434	4,330	2,358	1,542	2,328	2,798	3,750
Massachusetts	2,343	1,774	1,600	1,900	1,800	1,412	744	923	1,185	1,600
Rhode Island	250	171	172	209	210	233	88	122	138	170
Connecticut	1,971	1,604	1,313	1,715	1,520	1,561	788	777	831	1,000
New York	38,107	31,074	27,495	30,762	29,000	20,710	13,815	17,363	20,891	27,300
New Jersey	3,073	2,357	2,066	2,458	2,250	2,181	1,171	1,127	1,255	1,470
Pennsylvania	41,873	35,571	32,195	38,745	37,200	20,794	12,240	15,485	19,187	27,900
Delaware	664	609	628	618	600	475	245	422	282	400
Maryland	6,845	5,750	5,159	6,083	5,800	3,961	2,177	2,603	2,943	4,350
NORTHEAST	**105,942**	**86,793**	**78,055**	**91,142**	**86,800**	**55,430**	**33,907**	**42,676**	**51,404**	**70,740**
Ohio	43,607	40,101	36,137	39,170	37,200	11,759	7,788	9,757	11,419	16,900
Indiana	25,459	23,414	21,705	24,655	23,800	7,523	5,344	6,121	6,912	9,800
Illinois	38,163	33,291	29,822	31,487	29,700	16,295	10,130	11,333	11,905	15,500
Iowa	60,111	55,456	47,461	47,729	43,700	20,937	14,245	17,179	19,479	26,500
Missouri	36,265	38,929	38,487	44,886	44,500	9,315	6,884	7,430	8,786	9,800
CORN BELT	**203,605**	**191,191**	**173,612**	**187,927**	**178,900**	**65,829**	**44,391**	**51,820**	**58,501**	**78,500**
Michigan	31,502	26,915	23,897	26,039	24,500	15,077	8,986	11,682	12,986	17,100
Wisconsin	63,921	56,939	54,962	59,847	58,800	48,149	27,199	38,341	43,574	60,500
Minnesota	55,896	51,600	46,689	50,534	48,000	26,024	17,761	20,825	23,437	29,600
LAKE STATES	**151,319**	**135,454**	**125,548**	**136,420**	**131,300**	**89,250**	**53,946**	**70,848**	**79,997**	**107,200**
North Dakota	15,823	15,623	14,831	15,280	15,000	9,555	6,614	5,911	5,539	5,700
South Dakota	14,441	14,657	13,835	14,258	13,800	10,810	9,755	11,254	11,364	12,000
Nebraska	19,907	18,988	17,309	17,160	16,200	13,268	11,232	12,632	13,935	15,900
Kansas	28,086	27,464	26,846	29,550	29,100	17,035	11,712	10,651	10,844	11,600
GREAT PLAINS	**78,257**	**76,732**	**72,821**	**76,348**	**74,100**	**50,668**	**39,313**	**40,448**	**41,682**	**45,200**
West Virginia	7,362	8,013	7,444	10,051	9,700	1,155	1,143	1,478	2,134	2,700
Kentucky	21,476	24,121	23,536	32,538	32,100	3,157	3,621	4,400	8,269	9,650
Tennessee	15,234	17,686	17,090	22,597	22,300	3,002	2,953	3,602	5,579	6,700
Virginia	16,105	16,035	15,285	19,222	18,800	4,450	4,181	4,675	6,343	7,350
North Carolina	10,322	10,053	10,115	12,591	12,500	3,365	2,695	3,841	4,317	5,100
APPALACHIAN	**70,499**	**75,903**	**73,470**	**96,999**	**95,400**	**15,129**	**14,593**	**17,996**	**26,642**	**31,500**
South Carolina	4,468	3,857	3,719	4,763	4,700	1,139	887	1,075	1,381	1,750
Georgia	6,917	7,118	6,678	8,909	8,700	1,696	1,455	1,722	2,652	3,400
Florida	1,419	1,692	1,910	2,885	2,800	543	447	629	916	1,400
Alabama	6,231	7,227	7,662	10,393	10,500	1,233	1,250	1,513	2,158	2,700
SOUTHEAST	**19,035**	**19,894**	**19,969**	**26,950**	**26,700**	**4,611**	**4,039**	**4,939**	**7,107**	**9,250**
Mississippi	6,618	7,045	7,431	8,752	8,800	1,697	1,531	2,130	2,168	2,550
Louisiana	5,064	4,831	4,594	6,192	6,000	775	763	872	1,872	2,670
Arkansas	6,456	7,500	8,040	11,022	10,900	1,181	1,014	1,047	1,882	2,200
DELTA STATES	**18,138**	**19,376**	**20,065**	**25,966**	**25,700**	**3,653**	**3,308**	**4,049**	**5,922**	**7,420**
Oklahoma	12,965	14,246	14,432	20,032	20,000	2,820	1,872	1,740	2,420	2,800
Texas	15,737	18,208	18,534	28,338	28,500	4,643	3,556	3,215	5,451	6,300
SOUTHERN PLAINS	**28,702**	**32,454**	**32,966**	**48,370**	**48,500**	**7,463**	**5,428**	**4,955**	**7,871**	**9,100**
Montana	11,458	11,059	10,613	11,857	11,500	1,736	1,695	1,512	2,130	2,450
Idaho	13,072	12,057	12,048	13,043	13,000	2,696	1,907	2,048	2,435	2,950
Wyoming	4,259	4,357	4,383	4,572	4,500	1,086	924	995	1,267	1,550
Colorado	9,600	9,504	9,505	10,564	10,600	5,252	3,744	3,755	4,418	5,200
New Mexico	2,340	2,532	2,833	3,427	3,500	560	490	591	786	1,000
Arizona	1,001	860	1,018	1,081	1,100	556	281	314	341	520
Utah	6,389	5,887	5,957	7,171	7,100	1,989	1,378	1,560	1,909	2,300
Nevada	1,264	1,177	1,299	1,524	1,550	291	189	233	367	520
MOUNTAIN STATES	**49,383**	**47,433**	**47,656**	**53,239**	**52,850**	**14,166**	**10,608**	**11,008**	**13,653**	**16,490**
Washington	9,759	8,658	8,215	9,327	9,150	3,734	1,837	2,234	3,019	5,300
Oregon	8,007	7,218	7,195	9,207	9,100	2,419	1,532	1,496	2,718	3,800
California	8,389	6,829	6,435	6,832	6,500	3,189	1,666	2,006	2,628	4,500
PACIFIC	**26,155**	**22,705**	**21,845**	**25,366**	**24,750**	**9,342**	**5,035**	**5,736**	**8,365**	**13,600**
TOTAL	**751,035**	**707,940**	**666,007**	**768,727**	**745,000**	**315,541**	**214,568**	**254,475**	**301,144**	**389,000**

[1]The Census in 1964 and the estimated number for July 1, 1981 include shear-bar and flail types. The Census in 1969, 1974 and 1978 covered only the number of shear-bar harvesters.

Principal Machines on Farms – 1981

STATE	POWER TRACTOR MOWERS (Cutter bar type only) Estimated July 1, 1958 Number	POWER TRACTOR MOWERS (Cutter bar type only) Estimated July 1, 1981 Number	SIDE DELIVERY RAKES Estimated July 1, 1958 Number	SIDE DELIVERY RAKES Estimated July 1, 1981 Number	MOWER CONDITIONERS[1] 1974 Census Number	MOWER CONDITIONERS[1] 1978 Census Number	MOWER CONDITIONERS[1] Estimated July 1, 1981 Number
Maine	9,000	7,570	10,000	6,520	1,378	2,092	2,440
New Hampshire	4,400	3,450	5,000	2,770	605	1,029	1,170
Vermont	10,000	10,100	10,300	8,140	2,776	4,104	5,000
Massachusetts	5,800	4,500	6,000	3,900	1,048	1,568	1,800
Rhode Island	550	400	500	350	102	144	160
Connecticut	4,500	3,960	4,000	2,760	786	1,234	1,480
New York	55,000	62,700	61,000	51,400	18,701	26,674	32,200
New Jersey	7,000	5,100	8,000	4,430	1,636	2,518	2,560
Pennsylvania	60,000	69,600	67,000	54,400	20,428	30,551	34,300
Delaware	1,750	1,230	2,200	1,130	525	603	830
Maryland	14,000	12,840	13,000	10,000	3,614	4,944	5,600
NORTHEAST	**172,000**	**181,450**	**187,000**	**145,800**	**51,599**	**75,461**	**87,540**
Ohio	70,000	74,000	86,000	63,100	20,268	28,007	32,800
Indiana	64,000	58,200	71,000	46,400	12,503	16,162	20,100
Illinois	106,000	81,200	86,000	60,400	18,793	21,817	28,500
Iowa	115,000	120,600	127,000	101,200	19,636	26,631	33,300
Missouri	80,000	96,800	50,000	59,200	17,228	24,047	30,700
CORN BELT	**435,000**	**430,800**	**420,000**	**330,300**	**88,428**	**116,664**	**145,400**
Michigan	48,000	55,600	85,000	48,700	15,924	22,066	25,200
Wisconsin	93,000	119,400	115,000	101,600	36,232	52,723	64,200
Minnesota	96,000	110,900	108,000	98,500	22,979	32,101	37,000
LAKE STATES	**237,000**	**285,900**	**308,000**	**248,800**	**75,135**	**106,890**	**126,400**
North Dakota	42,000	46,300	26,000	26,000	5,971	6,395	8,300
South Dakota	44,000	53,700	31,000	26,200	4,445	5,715	6,100
Nebraska	61,000	64,900	41,000	40,400	9,225	15,128	14,800
Kansas	62,000	63,400	42,000	41,800	9,247	17,520	16,300
GREAT PLAINS	**209,000**	**228,300**	**140,000**	**134,400**	**28,888**	**44,758**	**45,500**
West Virginia	14,000	21,200	8,000	11,000	3,484	5,401	5,600
Kentucky	48,000	57,300	28,000	35,900	14,718	24,497	24,800
Tennessee	47,000	61,600	25,500	28,300	12,037	17,526	19,700
Virginia	28,000	37,900	25,500	27,700	8,714	13,099	14,800
North Carolina	27,000	37,000	15,000	18,300	6,824	10,767	10,900
APPALACHIAN	**164,000**	**215,000**	**102,000**	**121,200**	**45,777**	**71,290**	**75,800**
South Carolina	12,500	11,900	7,500	6,950	2,471	3,612	4,000
Georgia	23,000	22,200	12,000	12,300	6,383	9,451	9,800
Florida	7,500	4,450	2,200	2,240	4,000	7,114	5,900
Alabama	19,000	20,200	7,300	8,810	5,367	8,834	8,400
SOUTHEAST	**62,000**	**58,750**	**29,000**	**30,300**	**18,221**	**29,011**	**28,100**
Mississippi	21,000	25,900	5,000	11,500	5,282	8,041	8,200
Louisiana	12,000	13,100	6,000	7,220	4,421	7,396	6,400
Arkansas	24,000	24,900	12,000	12,200	5,521	8,653	9,900
DELTA STATES	**57,000**	**63,900**	**23,000**	**30,920**	**15,224**	**24,090**	**24,500**
Oklahoma	37,000	38,100	22,000	23,000	7,703	15,717	14,000
Texas	48,000	55,600	21,000	26,500	19,487	34,266	32,700
SOUTHERN PLAINS	**85,000**	**93,700**	**43,000**	**49,500**	**27,190**	**49,983**	**46,700**
Montana	23,000	25,500	15,000	16,100	3,205	7,513	4,750
Idaho	27,000	25,100	23,000	19,200	3,367	9,282	5,090
Wyoming	10,500	7,180	6,000	6,050	1,179	3,530	1,900
Colorado	24,000	18,900	25,000	17,200	2,712	7,449	4,280
New Mexico	8,000	5,560	8,000	4,930	1,005	2,451	1,460
Arizona	4,500	2,380	3,700	1,640	427	841	590
Utah	11,700	13,220	12,000	10,900	2,257	5,292	3,970
Nevada	2,300	1,860	2,300	1,760	384	1,286	530
MOUNTAIN STATES	**111,000**	**99,700**	**95,000**	**77,780**	**14,536**	**37,644**	**22,570**
Washington	27,000	25,400	16,000	15,700	4,218	8,536	6,480
Oregon	23,000	23,700	15,000	13,900	3,634	7,487	6,120
California	33,000	28,400	22,000	16,400	3,590	8,129	4,890
PACIFIC	**83,000**	**77,500**	**53,000**	**46,000**	**11,442**	**24,152**	**17,490**
TOTAL	**1,615,000**	**1,735,000**	**1,400,000**	**1,215,000**	**376,440**	**579,943**	**620,000**

[1]Does not include windrowers with conditioning rolls.

Principal Machines on Farms – 1981

STATE	POWER ELEVATORS Estimated July 1,1951 Number	POWER ELEVATORS Estimated July 1, 1958 Number	POWER ELEVATORS Estimated July 1, 1981 Number	Manure Spreaders Estimated July 1, 1981 Number	Corn and Cotton Planters Estimated July 1, 1981 Number	Grain Drills Estimated July 1, 1981 Number
Maine			5,380	3,570	365	945
New Hampshire			2,520	2,210	320	70
Vermont	1,200	12,000	8,100	7,000	1,770	365
Massachusetts			3,650	2,620	980	130
Rhode Island			520	310	115	35
Connecticut			4,240	2,630	1,140	95
New York	7,200	35,000	70,500	44,700	21,900	29,600
New Jersey	2,000	5,500	6,220	2,760	2,660	2,700
Pennsylvania	9,600	38,000	75,000	47,000	36,900	44,800
Delaware	500	2,000	3,970	1,980	2,350	2,230
Maryland	2,500	7,500	16,500	9,570	9,540	9,900
NORTHEAST	**23,000**	**100,000**	**196,600**	**124,350**	**78,040**	**90,870**
Ohio	27,000	68,000	128,500	64,100	70,900	70,600
Indiana	30,000	66,000	127,600	57,300	72,600	57,400
Illinois	61,000	110,000	194,600	83,800	105,700	72,100
Iowa	80,000	122,000	204,200	113,600	117,800	67,400
Missouri	15,000	41,000	90,900	65,000	56,000	58,200
CORN BELT	**213,000**	**407,000**	**745,800**	**383,800**	**423,000**	**325,700**
Michigan	14,000	45,000	91,200	41,900	42,900	57,000
Wisconsin	15,000	48,000	143,700	95,100	75,400	72,300
Minnesota	46,000	90,000	160,700	87,500	90,900	84,000
LAKE STATES	**75,000**	**183,000**	**395,600**	**224,500**	**209,200**	**213,300**
North Dakota	28,000	45,000	77,900	23,700	17,100	66,400
South Dakota	24,000	40,000	69,300	33,200	34,400	37,600
Nebraska	36,000	60,000	107,300	51,200	50,900	48,200
Kansas	25,000	55,000	114,500	43,000	25,000	79,000
GREAT PLAINS	**113,000**	**200,000**	**369,000**	**151,100**	**127,400**	**231,200**
West Virginia	500	3,000	6,880	9,600	5,880	4,120
Kentucky	2,500	10,000	26,600	32,000	43,400	12,800
Tennessee	1,000	6,500	16,300	23,500	58,600	16,000
Virginia	2,000	11,000	20,600	25,000	29,500	19,400
North Carolina	1,000	7,500	22,200	24,200	82,900	25,900
APPALACHIAN	**7,000**	**38,000**	**92,580**	**114,300**	**220,280**	**78,220**
South Carolina	300	2,000	5,040	4,570	34,900	13,400
Georgia	900	6,000	15,100	7,630	44,000	11,500
Florida	300	1,500	4,000	1,320	6,740	2,000
Alabama	500	4,500	12,330	5,170	48,000	8,100
SOUTHEAST	**2,000**	**14,000**	**36,470**	**18,690**	**133,640**	**35,000**
Mississippi	700	4,500	8,460	5,840	59,800	9,520
Louisiana	400	1,000	2,770	3,340	22,400	8,550
Arkansas	900	4,500	10,350	8,150	24,600	15,300
DELTA STATES	**2,000**	**10,000**	**21,580**	**17,330**	**106,800**	**33,370**
Oklahoma	6,000	12,000	27,600	10,500	10,500	37,000
Texas	9,000	23,000	43,800	19,800	62,900	57,600
SOUTHERN PLAINS	**15,000**	**35,000**	**71,400**	**30,300**	**73,400**	**94,600**
Montana	7,500	17,500	30,600	12,300	1,250	24,700
Idaho	3,100	13,300	26,800	15,500	3,030	18,200
Wyoming	700	2,500	5,490	5,380	1,110	4,820
Colorado	7,000	13,000	27,500	16,000	7,090	18,200
New Mexico	500	1,500	2,830	2,610	3,600	2,270
Arizona	100	700	1,980	1,100	2,210	1,670
Utah	700	5,000	11,030	8,490	1,940	6,400
Nevada	400	500	1,040	1,250	70	380
MOUNTAIN STATES	**20,000**	**54,000**	**107,270**	**62,630**	**20,300**	**76,640**
Washington	2,000	8,000	23,800	16,500	2,110	14,700
Oregon	3,000	8,000	19,200	14,400	1,310	13,800
California	4,000	13,000	25,700	17,100	10,520	10,600
PACIFIC	**9,000**	**29,000**	**68,700**	**48,000**	**13,940**	**39,100**
TOTAL	**479,000**	**1,070,000**	**2,105,000**	**1,175,000**	**1,406,000**	**1,218,000**

Principal Machines on Farms – 1981

STATE	MOTOR TRUCKS							Internal Combustion Engines[2]	Chain Saws
	1954 Adj. Cen. 1,000's[1]	1959 Census 1,000's	1964 Census 1,000's	1969 Census 1,000's	1974 Census 1,000's	1978 Census 1,000's	Estimated July 1, 1981 1,000's	Estimated July 1, 1981 Number	Estimated July 1, 1981 Number
Maine	18.1	17.3	14.8	12.1	11.3	13.5	13.6	1,880	8,620
New Hampshire	8.3	6.8	5.6	4.0	3.7	4.4	4.4	1,750	2,875
Vermont	11.1	10.0	8.1	6.1	6.2	7.9	7.9	2,470	7,120
Massachusetts	14.3	12.3	10.6	8.4	7.7	9.9	10.0	2,530	5,220
Rhode Island	1.9	1.9	1.8	1.2	1.2	1.5	1.5	260	725
Connecticut	13.2	11.0	9.9	7.4	6.2	7.5	7.6	2,210	4,360
New York	70.5	66.5	62.9	53.6	53.6	61.2	61.6	29,200	57,200
New Jersey	24.4	20.9	17.3	14.3	12.9	16.5	16.7	3,250	6,890
Pennsylvania	71.0	71.4	69.5	57.3	55.5	66.3	66.8	28,700	50,000
Delaware	5.2	5.3	5.2	5.1	5.7	6.5	6.5	1,300	2,890
Maryland	22.0	21.2	21.3	19.5	21.3	25.5	25.7	6,350	14,000
NORTHEAST	**260.0**	**244.6**	**227.0**	**189.0**	**185.3**	**220.7**	**222.3**	**79,900**	**159,900**
Ohio	77.0	81.5	91.4	93.7	97.8	112.9	113.7	27,300	69,700
Indiana	77.4	88.2	99.0	100.1	103.9	120.2	121.0	28,200	75,200
Illinois	99.9	113.7	120.9	129.3	139.9	155.4	156.5	41,600	81,600
Iowa	84.3	99.8	106.7	121.4	137.1	148.0	149.0	44,200	64,900
Missouri	95.8	109.7	123.0	132.5	134.0	162.5	163.7	45,100	108,400
CORN BELT	**434.4**	**492.9**	**541.0**	**577.0**	**612.7**	**699.0**	**703.9**	**186,400**	**399,800**
Michigan	70.5	75.7	80.5	74.6	73.6	83.4	84.0	25,200	52,300
Wisconsin	87.0	90.6	97.0	89.0	92.3	100.9	101.6	46,800	106,100
Minnesota	90.0	103.4	112.5	116.9	130.1	147.4	148.5	65,000	75,700
LAKE STATES	**247.5**	**269.7**	**290.0**	**280.5**	**296.0**	**331.7**	**334.1**	**137,000**	**234,100**
North Dakota	66.8	75.5	81.6	91.2	101.3	109.2	109.9	48,100	4,940
South Dakota	47.7	52.3	56.5	57.8	65.1	66.9	67.4	32,500	3,790
Nebraska	72.0	83.4	93.1	96.4	108.5	120.5	121.3	43,500	16,070
Kansas	112.1	122.3	134.0	141.3	150.9	164.4	165.6	57,200	26,600
GREAT PLAINS	**298.6**	**333.5**	**365.2**	**386.7**	**425.8**	**461.0**	**464.4**	**181,300**	**51,400**
West Virginia	26.0	24.7	24.1	19.5	16.9	21.8	21.9	6,820	24,700
Kentucky	66.7	74.9	90.5	97.1	95.8	125.4	126.3	22,400	51,100
Tennessee	71.6	76.8	86.3	92.8	88.1	104.6	105.3	16,900	67,500
Virginia	57.5	58.0	59.2	55.9	55.5	70.1	70.6	16,400	56,000
North Carolina	84.5	91.1	101.1	99.3	93.5	113.5	114.3	21,600	100,300
APPALACHIAN	**306.3**	**325.5**	**361.2**	**364.6**	**349.8**	**435.4**	**438.4**	**84,120**	**299,600**
South Carolina	39.2	39.1	39.0	35.3	33.7	40.5	40.8	8,450	28,300
Georgia	76.2	72.8	76.6	70.9	69.2	79.8	80.3	17,500	39,000
Florida	36.6	36.4	40.6	37.8	40.1	54.1	54.4	16,900	8,900
Alabama	63.7	63.4	69.5	67.4	64.4	75.1	75.7	14,300	36,700
SOUTHEAST	**215.7**	**211.7**	**225.7**	**211.4**	**207.4**	**249.5**	**251.2**	**57,150**	**112,900**
Mississippi	76.2	71.5	75.1	66.4	60.5	65.5	66.0	13,900	43,400
Louisiana	47.3	47.2	51.3	44.7	41.6	50.4	50.8	15,600	23,800
Arkansas	76.2	73.2	80.6	71.4	69.5	88.0	88.5	18,700	36,400
DELTA STATES	**199.7**	**191.9**	**207.0**	**182.5**	**171.6**	**203.9**	**205.3**	**48,200**	**103,600**
Oklahoma	85.7	92.7	105.1	106.8	101.6	126.2	127.1	28,200	11,800
Texas	187.8	197.8	211.0	227.6	208.1	257.3	259.0	80,000	23,000
SOUTHERN PLAINS	**273.5**	**290.5**	**316.1**	**334.4**	**309.7**	**383.5**	**386.1**	**108,200**	**34,800**
Montana	48.5	52.8	58.2	58.3	61.9	68.9	69.4	25,300	14,070
Idaho	38.7	44.0	48.3	47.1	51.4	59.2	59.7	20,800	15,600
Wyoming	15.0	16.2	17.7	18.4	19.2	20.6	20.7	8,320	3,800
Colorado	48.5	51.7	55.9	55.5	56.9	66.4	66.9	26,300	7,170
New Mexico	21.3	20.3	23.4	18.8	20.0	26.4	26.7	10,000	3,590
Arizona	13.5	16.8	17.2	12.1	14.4	16.8	16.9	6,680	610
Utah	18.0	18.8	20.3	18.3	19.4	22.7	22.9	8,580	2,840
Nevada	3.9	4.5	4.5	5.0	5.4	6.5	6.5	1,950	720
MOUNTAIN STATES	**207.4**	**225.1**	**245.5**	**233.5**	**248.6**	**287.5**	**289.7**	**107,930**	**48,400**
Washington	55.4	60.2	64.2	56.7	57.1	71.4	71.9	21,800	27,000
Oregon	47.7	48.9	53.6	46.2	49.6	60.8	61.2	28,100	30,600
California	128.8	131.0	126.1	115.7	118.8	142.7	143.7	81,900	37,900
PACIFIC	**231.9**	**240.1**	**243.9**	**218.6**	**225.5**	**274.9**	**276.8**	**131,800**	**95,500**
TOTAL	**2,675.0**	**2,825.5**	**3,022.6**	**2,978.2**	**3,032.4**	**3,547.1**	**3,572.0**	**1,122,000**	**1,540,000**

[1]Census numbers have been adjusted to bring them more in line with 1959 and later data based on the new definition of a farm.

[2]Includes engines used for stationary work such as irrigation, auxiliary engines on combines, balers, etc., and a small number of power units not elsewhere classified.

NEW AGRICULTURAL WHEEL TRACTOR IMPORTS, JAN.-JUNE, 1981

(Excludes garden tractors except as indicated in headings, footnotes.)
Number of units/Value in thousands of dollars

Nation of Origin	Under 20 HP*	20-29 HP*	30-39 HP*	40-79 HP*	80-99 HP*	100 HP and Over*	HP Not Specifically Provided*
Canada	2/$2	7/$10	40/$360	22/$385	64/$2,345	232/$10,522	1,062/$62,636
United Kingdom	.....	145/1,310	180/1,401	3,639/38,762	624/8,177	489/8,993	7/119
Belgium	.....	.....	.....	639/7,870	.....	.....	.....
West Germany	.....	1/2	.....	3,201/31,271	1,286/18,417	302/5,704	5/97
Italy	134/111	10/38	111/498	1,375/11,022	285/4,357	110/1,995	47/331
Romania	.....	93/151	256/646	1,557/5,364	.....	.....	.....
U.S.S.R.	.....	.....	3/12	104/335	.....	.....	.....
Japan	12,408/37,734	7,240/27,065	2,777/11,044	1,034/6,267	.....	84/286	96/317
Others	6/18	7/19	19/138	77/2,072	.....	13/760	5/105
Totals	**12,550/$37,865**	**7,503/$28,595**	**3,386/$14,099**	**11,648/$103,348**	**2,259/$33,296**	**1,230/$28,260**	**1,222/$63,605**

NEW AGRICULTURAL WHEEL TRACTOR IMPORTS, JAN.-DEC., 1980

(Excludes garden tractors except as indicated in headings, footnotes.)
Number of units/Value in thousands of dollars

Nation of Origin	Under 20 HP*	20-29 HP*	30-39 HP*	40-79 HP*	80-99 HP*	100 HP and Over*	HP Not Specifically Provided*
Canada	14/$47	12/$32	90/$626	244/$7,824	187/$6,096	755/$29,635	1,662/$89,530
United Kingdom	14/16	106/721	579/4,173	9,471/95,770	2,395/28,592	226/4,655	53/449
Belgium	7/56	12/89	.....	220/10,142	.....	2/7	.....
West Germany	10/12	4/8	94/2,080	7,420/80,459	3,650/52,874	987/27,059	4/89
Italy	33/72	31/108	211/787	2,011/13,807	55/868	189/2,884	156/1,568
Romania	.....	1,280/2,615	827/1,838	2,110/6,582	.....	.....	2/14
Poland	.....	.....	1/7	54/429	103/584	47/526	.....
U.S.S.R.	.....	1/2	.....	455/1,422	.....	.....	.....
Japan	16,917/42,213	15,897/54,470	7,622/35,193	2,120/15,661	5/36	2/31	80/469
Others	.....	53/254	11/499	102/1,567	1/13	3/180	3/48
Totals	**16,995/$42,415**	**17,396/$58,298**	**9,435/$45,202**	**24,757/$233,662**	**6,396/$89,063**	**2,211/$84,976**	**1,960/$92,167**

NEW AGRICULTURAL WHEEL TRACTOR IMPORTS, JAN.-DEC., 1979

(Excludes garden tractors except as indicated in headings, footnotes.)
Number of units/Value in thousands of dollars

Nation of Origin	Under 20 HP*	20-29 HP*	30-39 HP*	40-79 HP*	80-99 HP*	100 HP and Over*	HP Not Specifically Provided*
Canada	21/$41	48/$96	144/$681	625/$11,979	345/$10,178	821/$29,358	1,579/$72,459
United Kingdom	19/132	242/1,310	330/1,820	7,997/66,026	3,611/26,386	24/195	92/667
Belgium	1/7	.....	10/69	87/827	1/19	1/69	12/155
France	.....	36/111	.....	34/1,731	2/63	.....	.....
West Germany	23/51	.....	25/178	9,125/82,337	2,416/30,017	1,281/21,059	320/3,884
Italy	234/1,649	519/1,868	103/382	1,033/8,734	219/2,500	14/325	26/230
Rumania	580/2,709	5/8	813/1,547	2,477/6,264	.....	2/22	8/80
Spain	.....	320/347	75/482	150/1,080	.....	.....	19/128
U.S.S.R.	.....	50/59	.....	158/544	.....	5/73	.....
Japan	17,480/44,088	26,856/89,370	16,435/57,383	2,876/21,635	6/59	350/760	526/1,434
Others	72/169	.....	2/18	39/342	.....	1/30	1/8
TOTALS	**18,430/$48,846**	**28,076/$93,189**	**17,937/$62,580**	**24,601/$201,499**	**6,600/$69,218**	**2,499/$51,891**	**2,583/$79,045**

Source: U.S. Dept. of Commerce, Industry & Trade Administration.
*Excluding garden tractors. **Including garden tractors. The term "industrial" here is understood to refer to such machines as fork-lifts, but not industrial tractors as defined in the farm and industrial equipment industry.

Not Elsewhere Specified, Excluding Industrial, Including Garden Types**	Totals	
100/$4,016	1,529/$80,366	Canada
82/834	5,166/59,596	United Kingdom
.....	639/7,870	Belgium
2/22	4,797/55,513	West Germany
109/1,614	2,171/19,966	Italy
.....	1,906/6,161	Romania
15/28	122/375	U.S.S.R.
3,294/4,958	26,933/87,671	Japan
2/63	129/3,175	Others
3,604/$11,535	**43,402/$320,603**	**Totals**

Not Elsewhere Specified, Excluding Industrial, Including Garden Types**	Totals	
194/$3,172	3,158/$136,967	Canada
94/209	12,938/134,585	United Kingdom
.....	789/10,294	Belgium
207/3,606	12,379/166,187	West Germany
571/5,890	3,070/25,984	Italy
33/153	4,252/11,202	Romania
1/66	206/1,612	Poland
28/33	485/1,457	U.S.S.R.
8,600/5,529	51,243/153,602	Japan
119/557	292/3,118	Others
9,847/$19,238	**88,997/$644,972**	**Totals**

Not Elsewhere Specified, Excluding Industrial, Including Garden Types**	Totals	
461/$8,224	4,044/$133,016	Canada
1,290/9,519	13,605/106,055	United Kingdom
1/6	113/1,152	Belgium
2/42	74/1,947	France
587/9,058	13,777/146,584	West Germany
871/6,467	3,019/22,155	Italy
2/22	3,887/10,652	Rumania
31/288	595/2,325	Spain
158/577	371/1,253	U.S.S.R.
4,534/5,144	69,063/219,893	Japan
105/326	220/893	Others
8,042/$39,673	**108,768/$845,925**	**TOTALS**

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DOLLAR VALUE OF FARM EQUIPMENT
IMPORTS BY COUNTRY OF ORIGIN, Jan., 1977-June, 1981
(in thousands)

Country	Jan.-Dec. 1977	Jan.-Dec. 1978	Jan.-Dec. 1979	Jan.-Dec. 1980	Jan.-June 1981
Canada	$619,662	$506,728	$831,155	$820,500	$373,636
Mexico	8,363	6,277	10,082	9,080	5,229
Brazil	NA*	2,194	892	1,002	756
Sweden	2,077	1,708	4,818	4,456	1,716
Norway	1,751	1,075	1,273	1,239	1,001
Denmark	4,054	4,513	7,158	5,703	2,480
Netherlands	13,560	12,690	16,942	15,407	8,458
United Kingdom	110,071	125,241	209,967	215,932	93,539
Belgium	78,191	66,347	93,709	67,188	32,960
France	36,715	36,351	62,294	51,488	25,100
West Germany	118,861	141,392	231,521	236,578	105,228
Austria	1,219	783	1,188	1,195	531
Hungary	4,474	4,673	10,727	10,155	5,129
U.S.S.R.	1,415	1,113	2,715	1,716	533
Poland	3,705	1,746	1,346	3,334	948
Romania	10,451	8,372	11,648	11,611	6,622
Italy	50,246	75,066	78,523	94,794	58,067
Spain	4,326	3,768	9,239	5,559	1,788
Israel	940	1,545	2,616	3,218	1,333
New Zealand	2,525	1,918	5,312	6,665	4,854
Australia	3,642	3,218	5,937	4,366	3,733
Japan	73,861	167,858	267,599	189,753	107,879
China (Taiwan)	1,273	1,446	1,916	1,573	994
South Africa	3,830	3,972	6,332	5,234	1,461
Others	2,347	2,762	5,561	5,287	2,548
TOTAL	**$1,157,560**	**$1,182,758**	**$1,880,470**	**$1,773,033**	**$846,527**

SOURCE: U.S. Dept. of Commerce, Industry & Trade Administration.
*Data not available, included with "others."

CONTROL NOTES: No. 215-U

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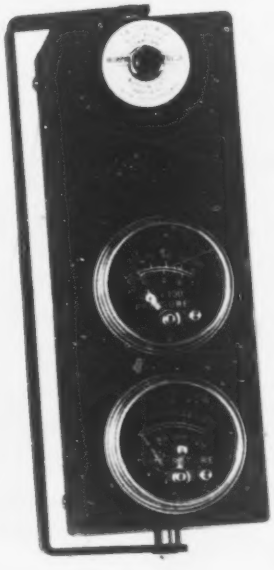

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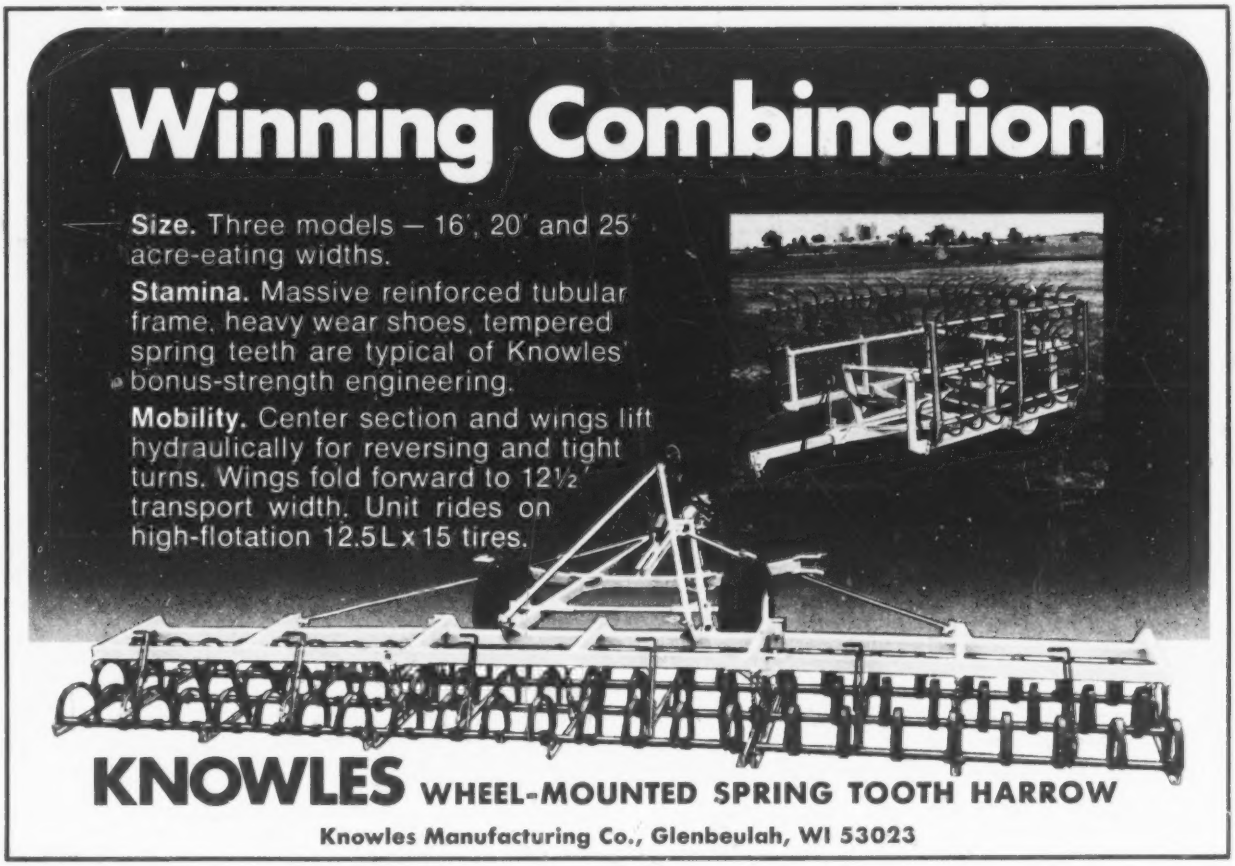
IMPORTS OF FARM EQUIPMENT BY PRODUCT

Product	Jan.-Dec., 1979 Quantity	Jan.-Dec., 1979 Value in Thousands of Dollars	Jan.-Dec., 1980 Quantity	Jan.-Dec., 1980 Value in Thousands of Dollars	Jan.-June, 1981 Quantity	Jan.-June, 1981 Value in Thousands of Dollars
Knives & Cutting Blades	7,030,211	$ 4,926	10,326,000	$ 12,406	3,501,804	$ 4,843
Plows & Listers	20,971	11,620	9,351	13,297	1,873	4,460
Cultivators & Weeders	22,026	31,345	16,854	27,760	5,732	13,577
Parts of Plows, Cultivators, Weeders & Listers	.....	30,534	.....	27,516	.....	15,549
Harrows, Rollers, Stalk Cutters, Soil Pulverizers	29,416	9,322	23,030	10,102	13,932	6,342
Parts of Harrows, Rollers, Stalk Cutters, etc.	.....	15,538	.....	14,882	.....	6,637
Planting, Seeding & Fertilizing Machinery	32,080	43,253	31,476	55,647	18,558	28,666
Parts of Planting, Seeding & Fertilizing Machinery	.....	14,685	.....	12,957	.....	7,834
Haying Machinery other than Mowers	9,749	15,655	9,183	24,751	4,310	10,596
Mowers except Lawn Mowers	18,641	20,600	17,912	25,802	9,559	15,691
Harvesting Machines, NES	17,623	282,895	17,667	283,829	6,897	101,139
Parts of Harvesting Machines	.....	113,999	.....	95,307	.....	32,988
Farm Wagons & Carts	11,900	10,559	10,829	11,733	5,585	8,249
Agricultural Machines & Implements, NES	.....	102,254	.....	85,859	.....	47,909
Parts of Agricultural Machines, NES	.....	72,262	.....	67,386	.....	37,506
Tractors, Agricultural, Wheel-Type, New, excluding Industrial*	108,787	645,952	88,997	644,972	43,402	320,603
Tractors, Agri., Used	4,132	25,740	3,040	19,013	1,782	10,451
Parts for Agri. Tractors	.....	451,981	.....	335,542	.....	169,147

SOURCE: U.S. Dept. of Commerce, Bureau of Industrial Economics.
NEC – Not elsewhere specified.
*Use of the term "Industrial" here is understood to refer to such machines as forklifts but not to industrial tractors as commonly defined in the farm and industrial equipment industry.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VALUE OF U.S. FARM EQUIPMENT EXPORTS BY COUNTRIES OF DESTINATION

(Value in thousands of dollars)

Country	1979	1980	Jan.-June, 1981
Western Hemisphere			
Canada	$1,003,343	$1,068,234	$749,912
Mexico	204,046	350,572	129,042
Guatemala	10,625	7,020	3,884
Honduras	7,360	6,573	3,158
Nicaragua	1,296	18,116	4,363
Costa Rica	6,213	7,875	1,989
Panama	4,828	4,917	3,573
Trinidad	3,164	4,507	3,111
Dominican Republic	7,057	15,018	4,338
Colombia	11,413	17,290	7,957
Venezuela	51,861	68,581	35,742
Brazil	24,389	36,697	19,229
Uruguay	7,434	6,323	1,831
Paraguay	2,808	3,432	1,588
Argentina	20,756	41,687	23,621
Chile	8,211	12,425	7,132
Ecuador	9,696	13,017	8,897
Peru	7,456	14,793	5,864
Europe			
Denmark	8,694	11,852	4,723
Sweden	8,892	9,739	6,976
United Kingdom	66,786	66,143	45,242
Netherlands	11,459	11,494	4,926
Belgium	93,668	84,389	66,072
France	90,350	111,678	58,584
West Germany	67,403	78,472	31,059
Hungary	8,078	11,455	7,190
Switzerland	3,033	3,985	2,420
Spain	14,042	20,382	7,812
Italy	9,692	15,235	8,971
Greece	7,976	5,013	786
Yugoslavia	6,020	7,360	1,350
U.S.S.R.	10,383	10,276	15,186
Poland	3,692	2,516	75
Middle East			
Iran	2,350	2,673	227
Iraq	2,917	7,940	2,738
Israel	17,859	14,181	7,901
Kuwait	2,932	4,622	2,588
Saudi Arabia	19,731	28,564	20,404
Syria	2,150	2,673	1,215
Arab Emirates	1,409	2,536	3,243
Asia and Pacific			
India	3,397	3,865	1,355
Thailand	5,078	3,509	1,816
Singapore	18,343	24,790	9,940
China (PRC)	3,022	11,672	2,452
China (Taiwan)	1,953	2,769	1,149
Malaysia	2,823	3,158	1,347
Indonesia	2,360	4,015	1,253
Philippines	6,680	4,654	2,771
Japan	38,108	33,284	13,085
Australia	119,390	183,083	98,409
New Zealand	8,906	11,711	4,249
Africa			
Algeria	1,363	2,205	2,205
Libya	18,237	7,233	8,879
Sudan	3,243	5,974	5,667
Nigeria	2,763	8,534	3,388
Congo (Braz.)	10	4,413	430
Egypt	4,988	5,234	7,778
Ivory Coast	12,364	3,713	722
Rep. South Africa	21,452	47,928	54,553
Total U.S. Exports, Farm & Industrial Equipment	**$2,187,420**	**$2,631,287**	**$1,568,922**

Source: U.S. Dept. of Commerce, Transportation & Capital Equipment Div.

FARM EQUIPMENT EXPORTS BY TYPE OF PRODUCT

Product	Jan.-Dec., 1979 Quantity	Jan.-Dec., 1979 Dollar Value in Thousands	Jan.-Dec., 1980 Quantity	Jan.-Dec., 1980 Dollar Value in Thousands	Jan.-June, 1981 Quantity	Jan.-June, 1981 Dollar Value in Thousands
Combines, pull-type	2,460	36,467	2,238	45,807	1,159	22,170
Combines, self-propelled	6,680	143,364	7,085	205,525	3,554	137,479
Cultivators, tractor-drawn or mounted	5,523	12,373	7,753	13,342	6,056	10,890
Cultivators, NEC, and Weeders	6,074	6,478	4,628	5,193	2,060	2,840
Farm Elevators and Blowers	3,531	9,372	3,246	9,579	1,975	7,184
Farm Wagons and Carts	5,985	3,227	2,855	3,428	1,570	3,086
Parts for Farm Wagons and Carts	.....	2,646	.....	1,471	.....	1,384
Fertilizing Machines	47,442	24,510	29,463	20,890	4,856	11,827
Forage Harvesters	3,861	29,824	6,146	38,960	2,661	21,486
Harrows, Disk	11,505	26,781	7,484	23,762	6,316	15,196
Harrows, NEC, & Soil Pulverizers	11,972	11,693	9,530	9,997	5,963	6,752
Parts for Harrows, Stalk Cutters & Soil Pulverizers	.....	13,680	.....	10,231	.....	6,556
Harvesting Machines, NEC	11,021	91,541	12,860	116,973	6,311	62,922
Harvesting Machine Parts	.....	60,731	.....	83,228	.....	53,282
Hay Balers	10,525	42,816	15,643	75,316	10,444	60,932
Haying Machines, NEC (incl. rakes & tedders)	7,286	25,353	7,555	36,214	6,071	29,809
Parts for Haying Machines	.....	31,839	.....	27,802	.....	14,064
Mowers, Cutterbar, tractor-drawn	2,853	6,181	3,032	6,791	2,462	6,102
Mowers, Rotary, tractor-drawn (excl. lawn mowers)	9,277	6,391	10,884	9,309	5,130	3,806
Mowers, NEC, tractor-drawn (excl. lawn mowers)	2,720	7,588	3,150	9,032	2,243	7,252
Planting Machines	8,218	11,260	6,355	11,897	5,419	15,147
Plows, Disk	4,461	6,687	3,555	7,405	2,156	4,829
Plows, Moldboard	3,415	11,050	4,067	12,584	3,452	9,195
Plows & Listers, NEC	6,067	12,243	8,009	12,854	2,568	7,239
Parts for Plows, Listers, Cultivators & Weeders	.....	36,494	.....	31,325	.....	18,981
Seeding Machines	24,409	22,549	14,461	21,248	10,896	15,471
Parts for Planting, Seeding & Fertilizing Machines	.....	18,489	.....	19,312	.....	10,780
Farm Tractors:						
Under 40 PTO HP	4,471	21,940	3,871	18,026	988	6,155
40-59 PTO HP	2,605	23,038	1,401	13,895	909	10,100
60-79 PTO HP	1,733	20,809	1,533	20,000	938	13,526
80-99 PTO HP	1,608	25,139	1,395	24,638	1,280	22,867
100-119 PTO HP	4,182	79,125	3,685	79,841	2,484	59,431
120-139 PTO HP	6,142	127,612	7,039	168,898	3,806	100,663
140-159 PTO HP	2,598	61,816	2,546	69,351	1,322	39,906
160-179 PTO HP	1,241	37,109	1,437	51,786	1,041	38,820
180 HP & Over	2,801	101,755	3,153	128,483	2,021	91,021
Other Farm Tractors	4,034	53,607	2,972	54,124	1,364	28,382
Parts for Farm Tractors	.....	611,457	.....	773,515	.....	387,152

SOURCE: U.S. Dept. of Commerce, Bureau of Industrial Economics.
NEC – Not elsewhere counted or classified.

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Wheel Tractors, Attachments and Parts, Value of Shipments, 1976-1980

(in thousands of dollars)

	1980	1979	1978	1977	1976
Wheel Tractors, Farm Type	2,761,480	2,901,693	2,264,398	2,424,139	2,235,111
Wheel Tractors, Non-Farm	115,154	165,506	132,694	115,458	93,876
Attachments for Wheel Tractors, Farm and Non-Farm	48,066	69,353	36,527	34,780	37,472
Parts for Wheel Tractors, Farm and Non-Farm	469,505	255,726	263,312	420,273	279,637
Wheel Tractor Chassis, Shipped as Part of Shovel Loader/Backhoe	306,736	351,306	278,269	212,826	122,525
TOTALS	**3,700,941**	**3,743,584**	**2,975,200**	**3,207,476**	**2,768,621**

Source: U.S. Dept. of Commerce, Bureau of the Census, Current Industrial Reports, Tractors (M35S).

Farm Machinery and Garden Equipment, Attachments and Parts, Value of Shipments, 1975-1979

(in thousands of dollars)

	1979	1978	1977	1976	1975
Planting, Seeding and Fertilizing Machinery	675,388	522,416	550,782	516,847	480,273
Harrows, Rollers, Pulverizers, Stalk Cutters	603,784	462,419	465,974	478,322	476,274
Plows	269,616	203,617	239,151	266,660	250,134
Harvesting Machinery	2,143,938	1,815,631	1,599,722	1,435,307	1,253,430
Haying Machinery	675,610	533,738	469,715	508,250	481,334
Farm Dairy Machines and Equipment	132,865	108,920	97,347	77,087	68,037
Sprayers and Dusters	239,486	197,931	161,709	158,848	155,752
Farm Elevators and Blowers	174,728	157,168	114,691	87,611	100,404
Cultivators and Weeders	267,696	206,125	140,079	224,013	227,440
Machines for Preparing Crops for Market or Use	390,442	356,008	308,932	233,656	262,379
Farm Poultry Equipment	223,343	159,452	127,867	100,472	70,023
Hog Equipment	117,518	95,226	54,481	59,793	37,574
Other Barn and Barnyard Equipment	309,000	251,587	188,150	160,580	137,250
Garden Tractors, Motor Tillers	NA	686,375	574,702	586,278	553,269
Farm Wagons, Other Farm Transportation Equipment[1]	277,227	247,779	183,934	173,130	178,577
Irrigation Systems	214,627	161,348	279,272	290,071	180,406
Commercial Turf, Mowing Equipment	136,088	NA	107,400*	NA	NA
Other Turf, Grounds Care Equipment	36,064	NA	172,900*	NA	NA
Consumer Nonriding Lawn, Garden, Snow Equipment	1,284,875	NA	844,400*	NA	NA
Consumer Riding Lawn, Garden, Snow Equipment	1,030,606	NA	776,700*	NA	NA
TOTALS	**8,833,388**	**5,479,495**	**6,773,261**	**5,356,925**	**4,912,556**

[1]Data for 1976, 1977 and 1978 include operator cabs in attachments and parts for these items.
NA – Not available or not applicable.
*Data from 1977 Census of Manufacturers.
Source: U.S. Dept. of Commerce, Bureau of the Census, Current Industrial Reports, Farm Machinery and Lawn and Garden Equipment (MA-35A).

Shipments of Farm Machines and Equipment

(in units, 1975-1979)

Type of Farm Equipment	1979	1978	1977	1976	1975
Balers, hay (all types):					
Bales under 200 lbs.	20,867	22,659	24,876	26,054	27,718
Bales over 200 lbs.	31,443	21,323	17,745	24,097	21,400
Blowers (includes forage type, combination grain-forage type)	15,787	12,018	10,348	9,826	10,082
Cabs (metal), farm tractor	49,259	54,651	6,766	12,216	11,734
Cabs, other equipment	4,648	3,995	9,025		
Combines, grain, pull-type and self-propelled	32,400	32,020	31,943	31,712	31,259
Combines, peanut	2,105	1,974	1,790	1,919	2,647
Corn heads	20,052	18,629	24,035	25,087	26,741
Cotton strippers (all types)	1,279	1,900	1,816	1,127	1,361
Cultivators, corn and cotton types[1]	43,618	38,355	33,999	40,299	48,404
Cultivators, field:					
Pull-type	19,340	13,440	17,470	22,703	21,709
Mounted	4,693	5,262	8,992	9,239	8,469
Cultivators, rotary:					
Ground driven, sections and machines[2]	16,480	16,794	16,219	.....	.....
Ground driven, integrally mounted	11,466	12,214	8,637	12,034	17,136
Power driven	757	628	672	1,186	9,513
Cultivators and weeders, other	32,283	42,148	46,372	30,659	20,296
Cutters and shredders or rotary mowers (pto):					
Flail-type	12,747	9,521	12,409	12,096	11,359
Horizontal blade-type	95,045	72,469	79,953	74,562	76,412

See footnotes at end of table.

(More...)

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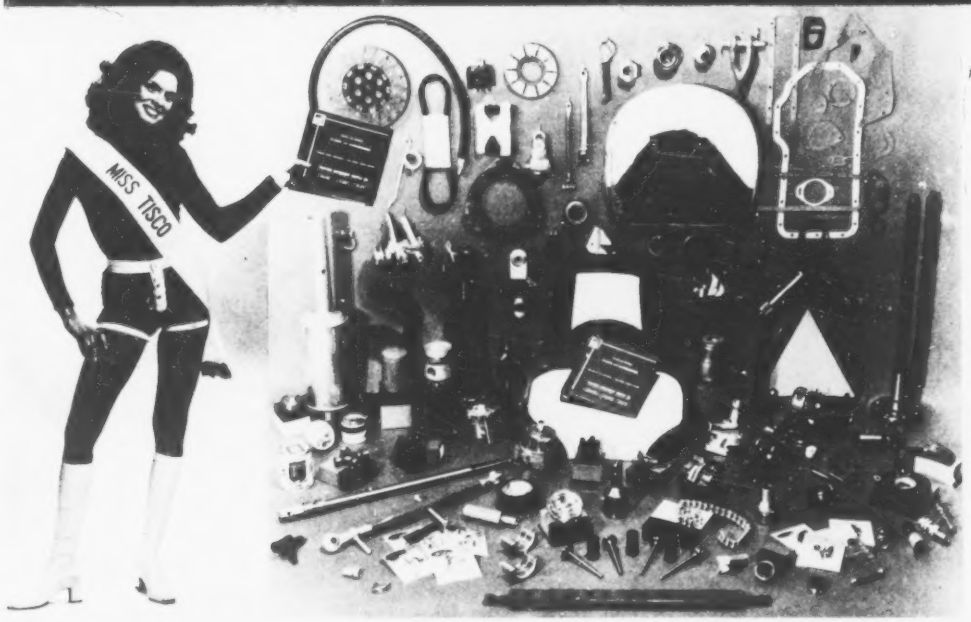

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Shipments *(continued)*

Type of Farm Equipment	1979	1978	1977	1976	1975
Diggers, peanut (shakers and windrowers but not combines)	1,847	2,002	2,517	1,706	2,207
Distributors (fertilizer):					
Dry	11,754	11,522	11,446	13,310	12,306
Liquid	7,196	6,503	6,619	5,635	4,997
Anhydrous Ammonia	7,178	6,455	6,562	8,458	5,233
Dryers, grain, hay and seed batch type, pto or electric-motor operated	9,809	9,355	10,373	6,525	6,268
Continuous flow-type	1,755	2,306	4,362	2,446	2,529
Heated air units	21,573	28,290	26,692	20,933	22,011
Dusters, power, all types	727	574	875	2,095	2,152
Elevators, portable:					
Single chain	8,224	7,211	5,004	5,625	7,196
Double chain	9,446	8,787	7,174	5,504	10,794
Auger-type, under 6-in. dia.	35,368	31,662	40,668	28,260	29,684
Auger-type, 6-in. dia.	56,318	79,401	73,628	53,425	55,207
Auger-type, over 6-in. dia.	66,491	81,664	58,382	51,232	50,016
Elevators, stationary and other	32,994	32,355	10,270	5,439	7,329
Fans, crop drying and aeration	51,441	59,912	45,668	24,997	19,586
Grain heads for combines	55,918	50,609	45,892	47,991	62,049
Grinder-mixers, stationary and portable	18,888	16,907	12,393	13,621	15,227
Harrows, disk	85,375	76,857	96,650	111,009	120,904
Harrow sections (spike-, spring-, and tine-tooth)	120,695	98,108	103,260	156,562	199,166

See footnotes at end of table.

(More...)

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Agricultural Machinery & Implements Co.

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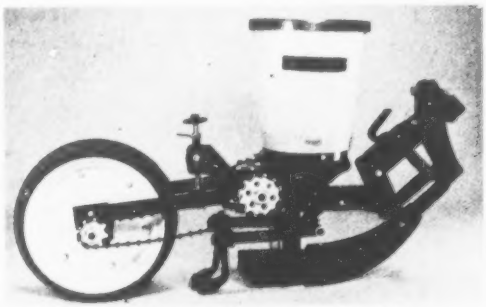
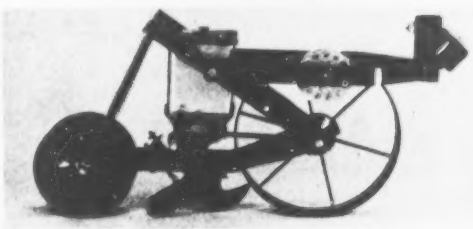


SINGLE SEEDING UNIT FOR COTTON, CORN, SORGHUM, SUNFLOWERS, SUGAR BEET AND MELONS.



SINGLE SEEDING UNIT T-10 FOR VEGETABLES AND SUGAR BEET. TRACTOR MOUNTED AND MANUAL VERSION SEEDER PLANTER.

Circle (30) on Reply Card

Shipments *(continued)*

Type of Farm Equipment	1979	1978	1977	1976	1975
Plows, disk, 1-way, 2-way	168	184	278	317	357
Plows, chisel or sweep type:					
Pull-type	15,455	12,090	15,084	21,505	19,351
Mounted	9,703	10,501	15,194	16,694	16,547
Plows, terracing and ditching	2,308	2,039	2,261	2,938	2,536
Plows, moldboard:					
Pull-type, 1-way	3,873	2,666	4,438	6,988	5,833
Mounted, 1-way	13,224	11,852	15,771	16,513	17,565
Semi-mounted, 1-way	18,883	14,099	22,294	23,841	27,283
Pull-type and mounted, 2-way	3,577	3,473	3,822	5,369	5,978
Plows, subsoilers (deep tillage)	8,321	6,964	8,129	5,527	5,143
Plows, other (except snow)	2,610	2,891	1,795	1,646	1,248
Rakes, hay, side-delivery, cylinder and finger wheel types	19,121	20,602	20,328	21,896	22,591
Rollers and harrow mulchers	8,527	8,384	8,619	10,018	10,453
Sprayers, field and row crop type:					
Power, self-propelled	4,257	3,590	2,941	3,686	4,583
Power, tractor-mounted	27,185	22,368	17,228	15,340	19,539
Power, non-tractor-mounted	17,031	14,142	13,498	15,151	17,965
Sprayers, power, air-carried type (field, row crop, orchard):					
Complete units	9,856	8,019	7,662	7,740	8,694
Attachment type				84	153
Spreaders, manure:					
Conveyor type	16,586	16,528	16,688	18,065	19,996
Tank type	8,772	7,584	7,853	8,174	9,981
Stackers, hay	1,803	1,442	1,037	4,517	8,972

See footnotes at end of table.

(More...)

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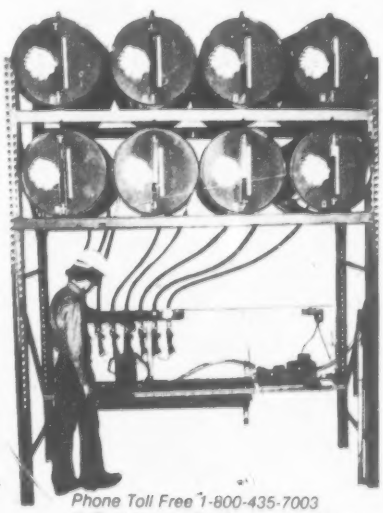
65 gallon containers with sight gauges are never removed for filling.



Containers are mounted on free standing steel frame. Lower console contains positive displacement pump with timer for filling containers (9-15 min.) from 55 gallon barrels. Dispensing faucets are keyed to overhead containers.

Twenty-one standard units available (4-36 containers). Ask about Meterings Systems, Mobile Lube Carts and Lube Trucks.

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230 South Bemiston St. Louis, Missouri 63105

Circle (36) on Reply Card

People start pollution.
People can stop it.

Shipments *(continued)*

Type of Farm Equipment	1979	1978	1977	1976	1975
Tool bars, basic units, pull or mounted	7,246	6,715	8,639	7,183	7,657
Tractors, track-laying type	19,812	22,057	19,968	18,972	20,453
Tractors, wheel-type:					
Farm type	159,973	136,240	168,888	175,977	187,117
Non-farm type	18,452	16,741	17,623	17,747	24,199
Transplanters, pull-type or mtd., and broadcast seeders	43,672	27,296	30,250	29,400	25,558
Wagons, farm type (chassis only) and trailer gear	53,247	53,257	57,831	59,336	93,570
Wagon boxes and racks for mounting on wagons and trailer gear:					
Manual unloading or dump	23,342	23,143	16,437	17,202	18,753
Gravity unloading (grain type)	39,377	31,072	28,714	32,470	41,350
Power unloading	19,950	18,599	19,135	20,825	22,480
Wagon boxes with integral running gear	8,136	7,206	6,097	6,107	7,407
Windrowers or swathers, grain harvesting, draper type	1,031	617	601	1,225	1,218
Windrowers, haying, self-propelled with conditioner	5,841	4,098	6,003	7,386	8,539

In some cases, I&T has combined data because of space limitations. If you need more information from MA-35A, write us.
DATA: Current Industrial Reports, Series MA-35A and M-35S, Bureau of the Census.
[1]Rear-mounted only; data for front-mounted machines are combined under Cultivators and Weeders, Other.
[2]Includes data for integrally mounted machines, under 4-row.
NA – Not available or not applicable.

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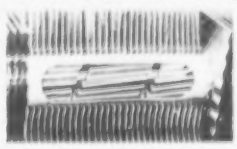

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